Drug & Cosmetic INDUSTRY

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October 1947

The $40,000 Loaf of Bread That was Made for Just One Woman!

She wasn't a movie star, or a New York model. She wasn't an heiress, or the first woman to fly around the world in a plane. She wasn't any one of these women, and yet she was all of them. She was Mrs. American Housewife.

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Drug & Cosmetic INDUSTRY

OCTOBER 1947

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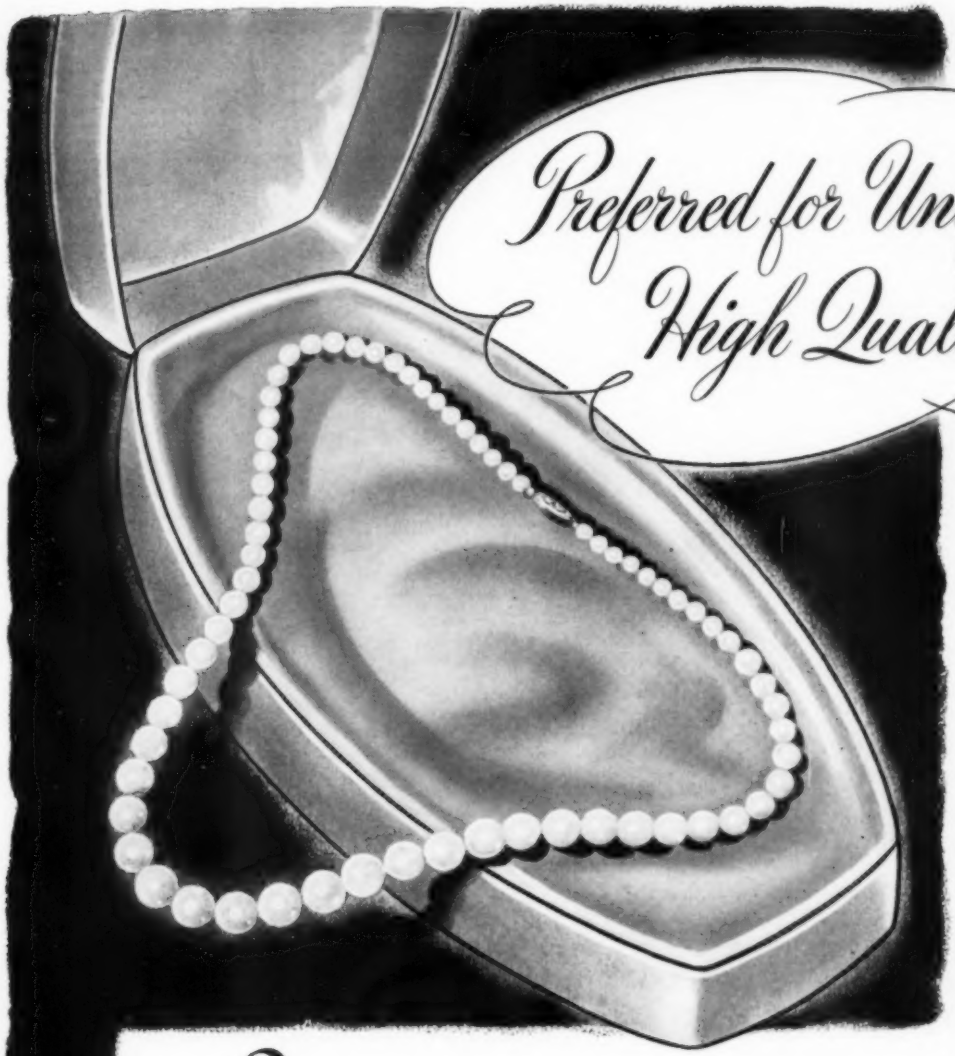

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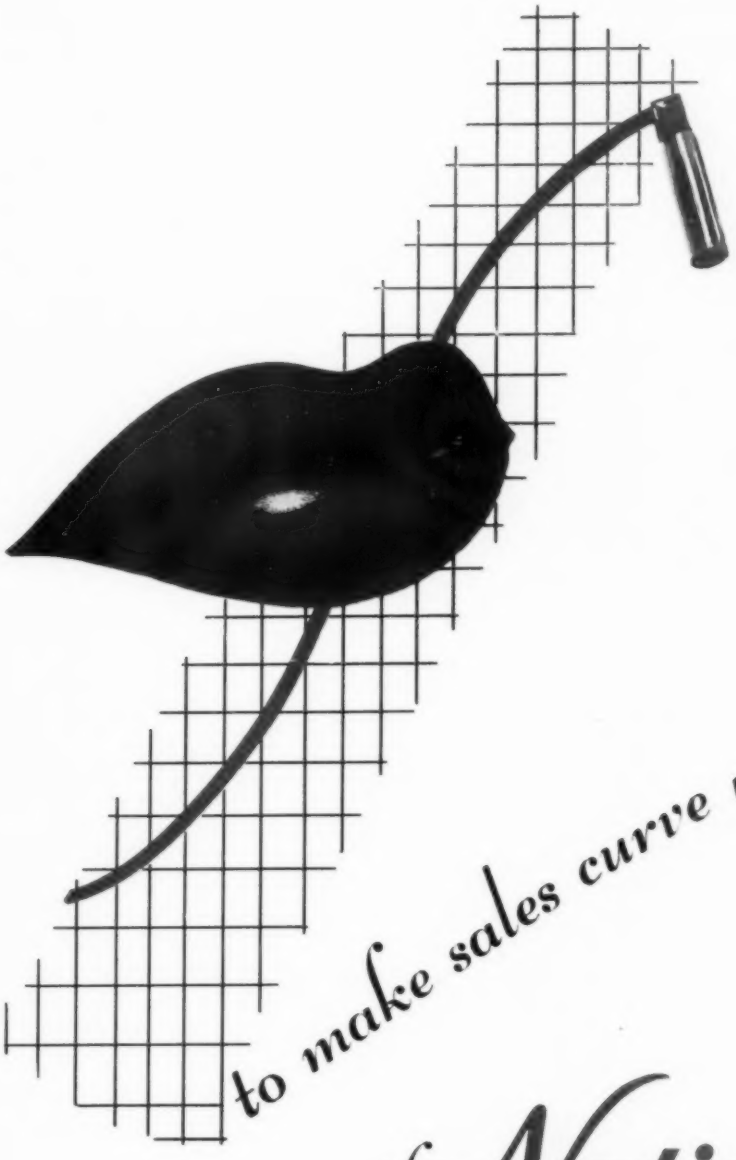

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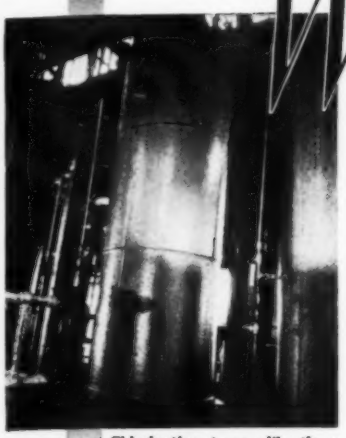

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PRODUCT	FORMULA	DESCRIPTION	REACTIONS
Monochlortoluene	$CH_3C_6H_4Cl$	Clear, colorless to straw colored liquid. A mixture of ortho and para isomers.	Reacts to form chlorbenzyl, chlorbenzal, chlorbenzenyl, and chlorbenzoyl compounds.
Benzyl Chloride	$C_6H_5CH_2Cl$	Clear, colorless to light yellow liquid.	Source of benzyl group. In Friedel-Crafts reactions. For production of mixed ethers, esters. Reacts with alcohols, anilines, sodium cyanide, sodium sulfhydrate, sodium sulfide.
Benzoyl Chloride	C_6H_5COCl	Clear, colorless liquid.	To introduce benzoyl group into organic compounds. Reacts with alcohol to form esters. To form ketones in Friedel-Crafts reactions. Reacts with ammonia, amines and benzene.
Benzoic Acid	C_6H_5COOH	White crystalline solid in powdered form.	As a source of the benzoyl group.
Benzoate of Soda	C_6H_5COONa	White crystalline solid in flake or powdered form.	As a source of the benzoyl group.

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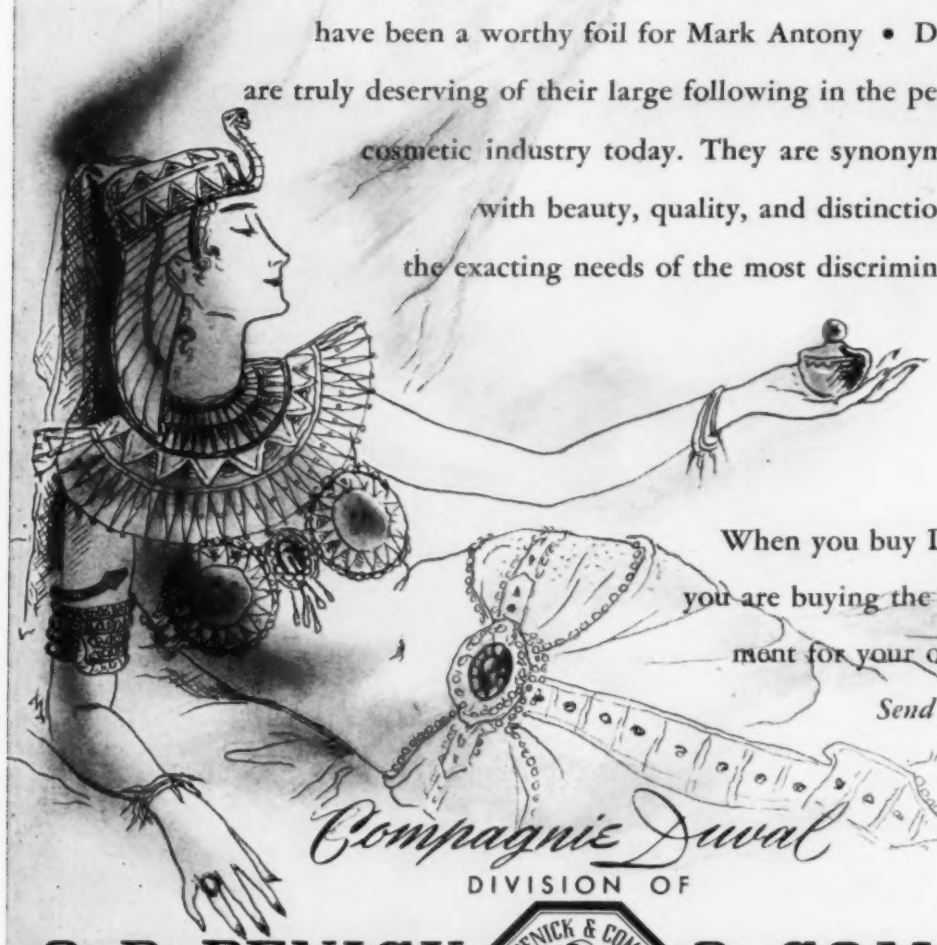

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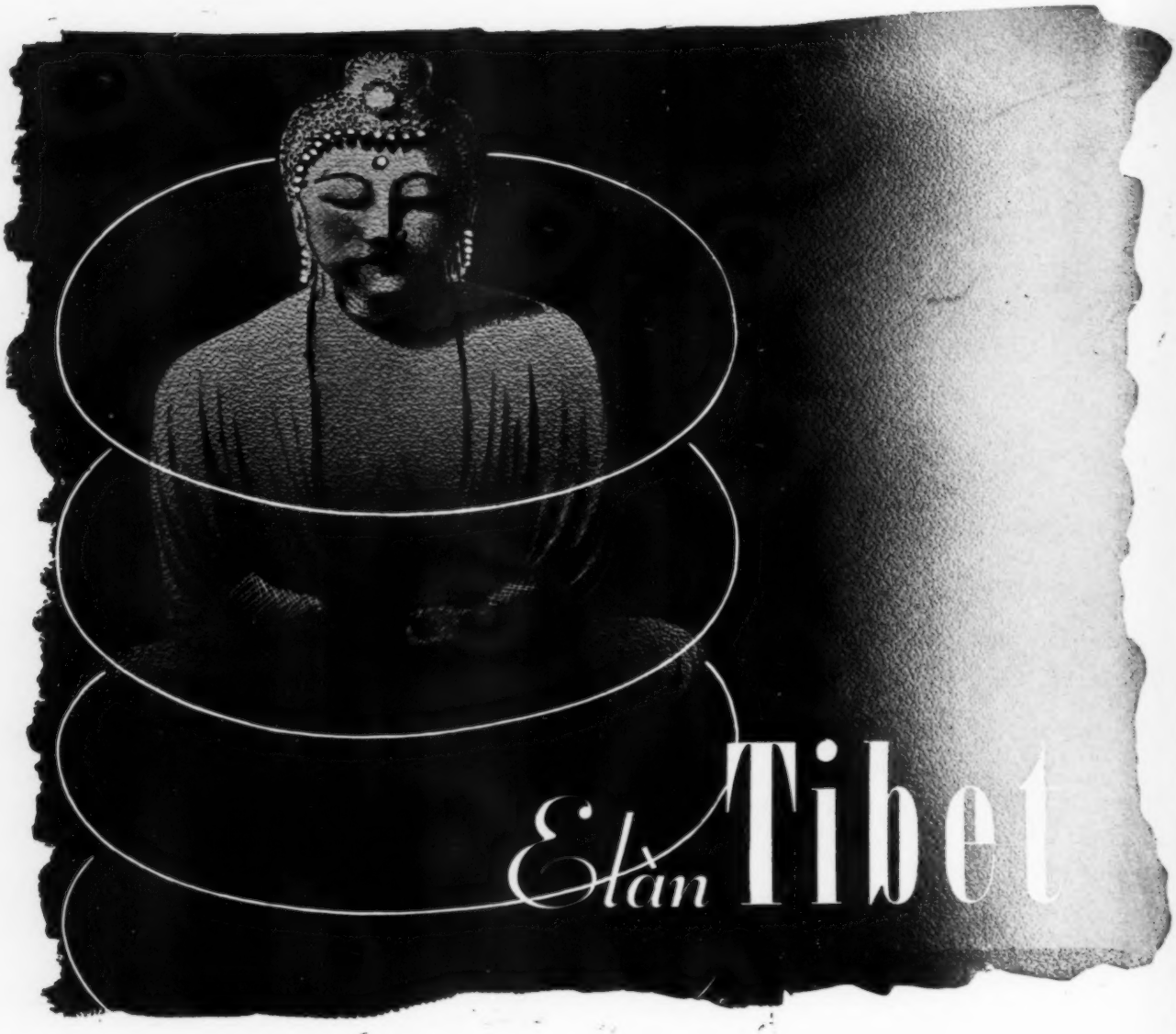

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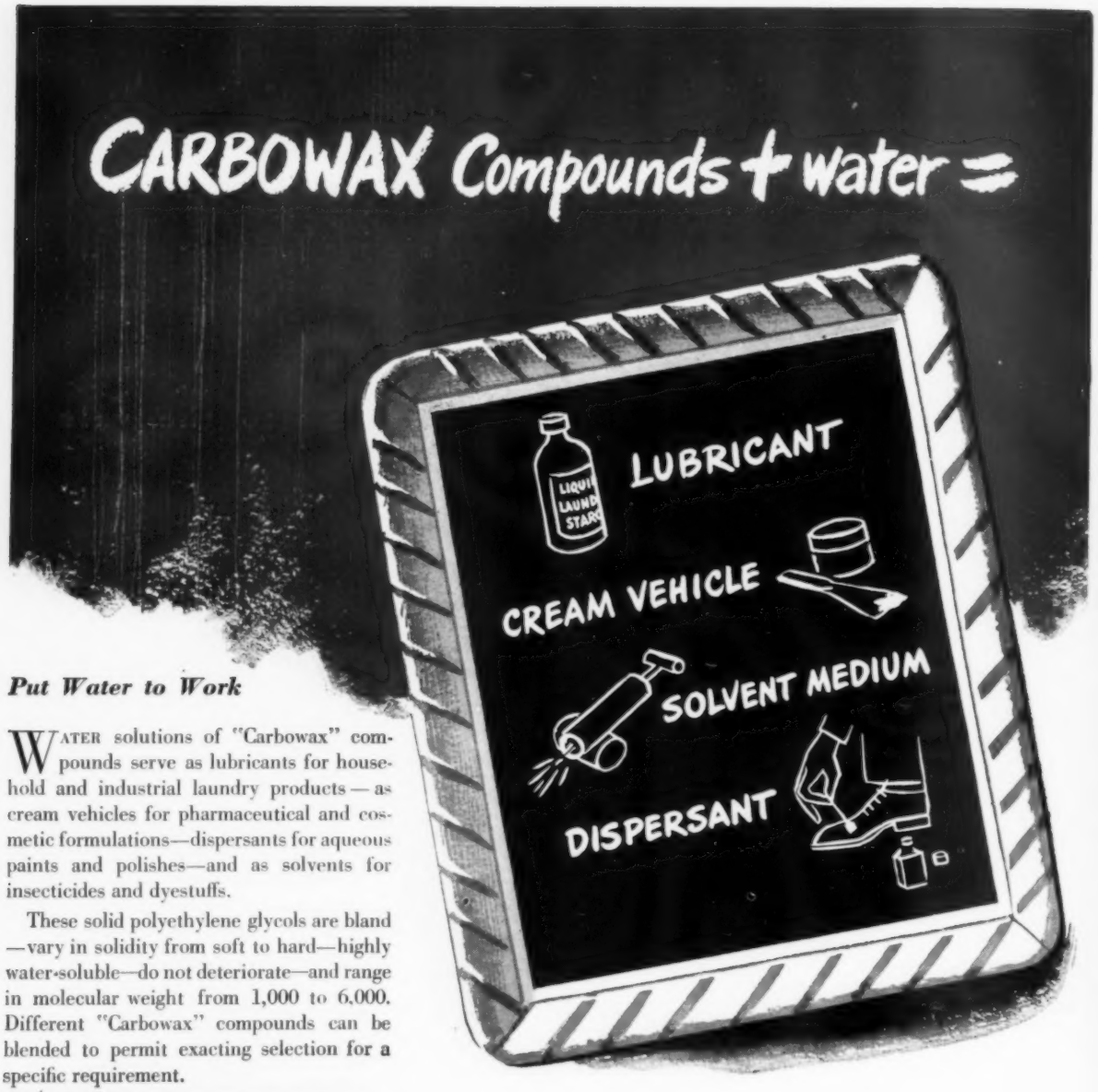

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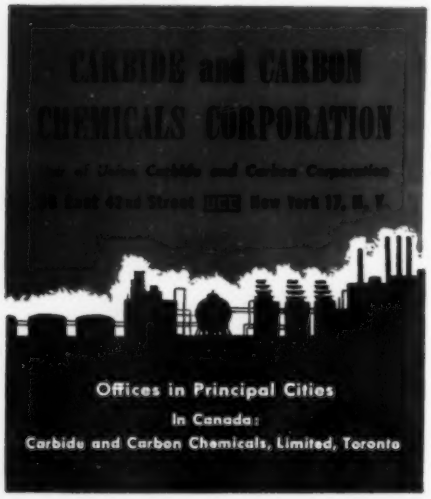

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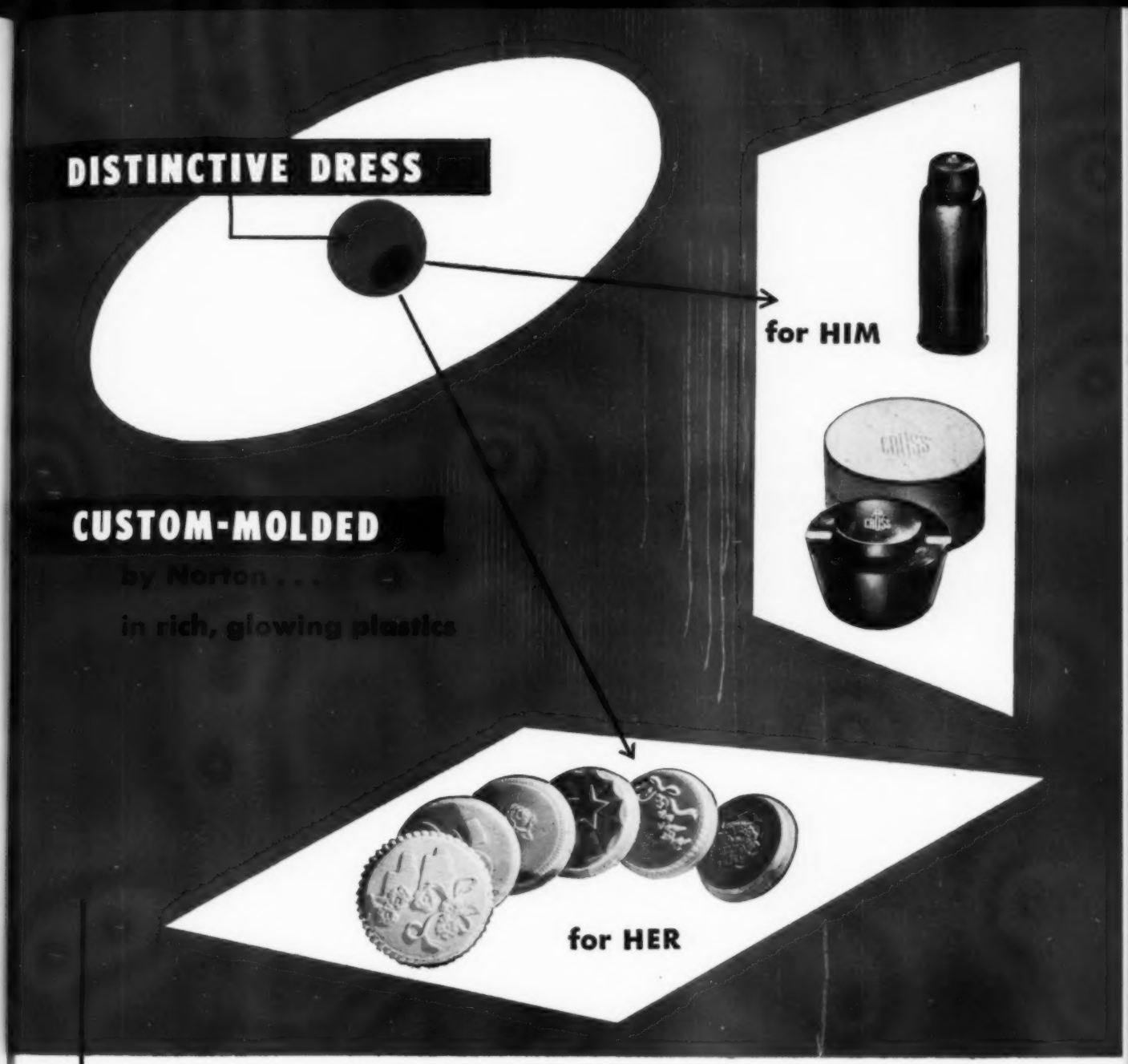

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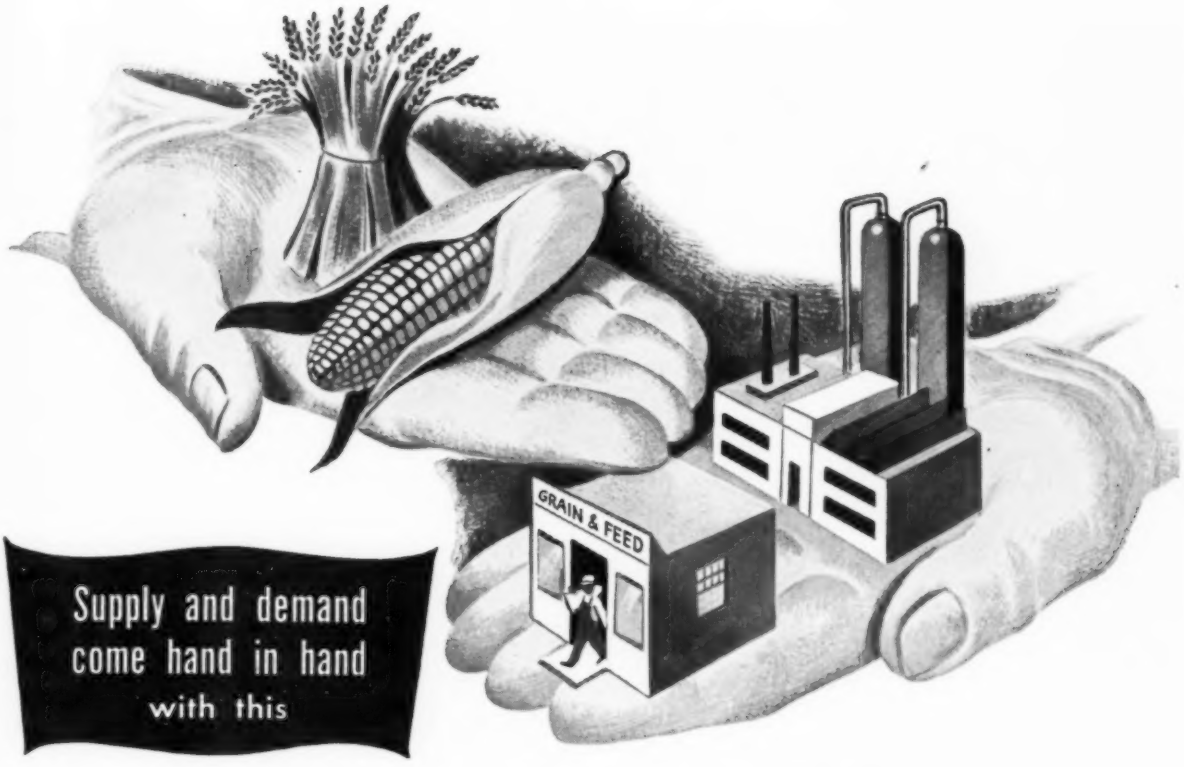

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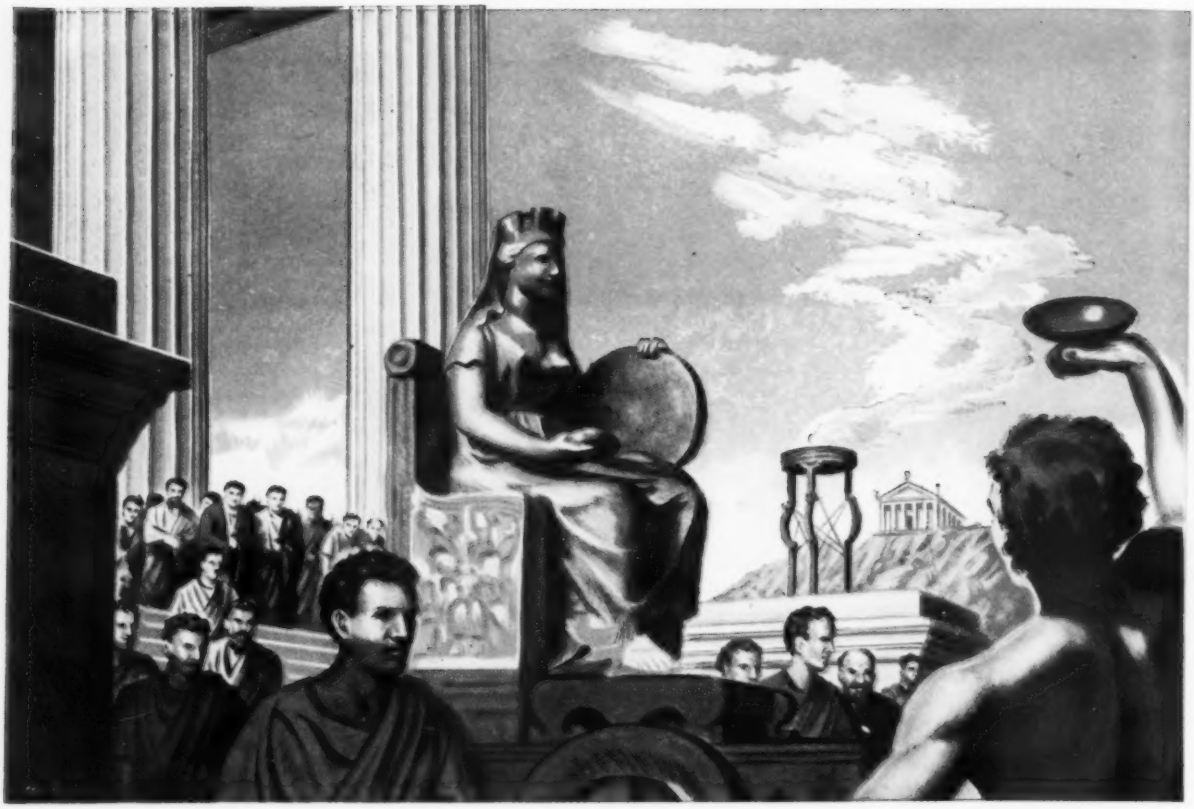

Mother of the Gods

Cybele, mother of the gods, was symbolized by the ancients' most famed meteorite. Carving a likeness of the Great Mother, the Phrygians set into the statue a "black stone, fallen from the heavens." For generations the meteorite was thus worshipped.

When the Romans heard that possession of the stone guaranteed prosperity, they forced King Attalus to abandon the sacred image to them. About 204 B.C., the statue and meteorite were taken to Rome and solemnly installed on the Palatine.

Diana of the Ephesians and the image of Venus at Cyprus appear to have been inspired by meteorites. One of the Moslems' most sacred relics, dating far earlier than the Seventh Century, is said to have fallen from the sky.

One of the basic constituents of meteorites is iron. Over 80 compounds of iron bearing the Mallinckrodt label are manufactured in the strict tradition of superior chemicals. **For iron compounds of uniform dependable purity specify Mallinckrodt Iron Chloride, Citrate, Iodide, Nitrate, Oxide, Pyrophosphate, Phosphate, Subsulfate, Iron and Ammonium Citrate (brown and green) etc.**

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KEEPING POSTED

The Proprietary Assn. and the A.Ph.A.

THE Proprietary Association, claiming membership representing eighty per cent of the national output of packaged medicines, has denied a charge by the American Pharmaceutical Association that it has taken steps to prevent passage, or to weaken by amendments, attempts by State Pharmaceutical Associations to "strengthen and perfect laws regulating the control and sales of dangerous drugs." A resolution censuring the Proprietary Association "for such practices" was adopted by the house of delegates of the A.Ph.A. at its annual meeting held last month. Proprietary Association Executive Vice-president Dr. Frederick J. Cullen replied to the charge that his association "has never interferred with and has in fact assisted in the passage of laws regulating traffic in dangerous drugs and narcotics. There must necessarily be a parting of the ways between the A.Ph.A. and the Proprietary Association," he added, "on the real bone of contention between the two associations." The big issue, he said, is the recent attempt "to restrict the sale of proprietary products which meet with the requirements of the Federal Food, Drug, and Cosmetic Act and which are offered for sale to the general public." Attempts to restrict sale of these products to regular retail drug outlets, the drug store employing a registered pharmacist, have the support of the A.Ph.A., while other groups also support State legislation restricting their sale through retail drug stores. Such legislation would freeze out of the retail drug picture the general store located in a rural area and the supermarket, according to a Proprietary Association spokesman, adding that the requirement that a retail outlet must qualify for selling proprietary medicines by employing a registered pharmacist is misleading, because no attempt is being made to assure that the registered pharmacist actually supervises the sale of packaged medicines. The A.Ph.A. also urged the Proprietary Association to register its protests to legislation sponsored by State pharmaceutical groups with the "constituted officials of State boards or associations" instead of trying to defeat or weaken the measures through lobbying activities. The Proprietary Association replied that despite its willingness to cooperate with these groups, rarely, if ever, do State boards contact drug industry representatives prior to introduction of the amending laws.

Vitamin B and Bees

IF ANYONE wants to know why the queen bee lives five years while her hard working subjects live only three months, Dr. Thomas S. Gardner has the answer—its because of a vitamin B factor, pantothenic acid. Dr. Gardner found that the royal jelly upon which the queen bee feeds is a rich source of pantothenic acid. He then tried the royal bee jelly in feeding fruit flies and found it lengthened their lives by 46 per cent. Other factors in the royal jelly, biotin, pyridoxin, and sodium yeast nucleate, also help to sustain life. No experiments have yet been made on human beings, but Dr. Gardner said that pentothenic acid is plentiful in young growing tissue and in milk and other food designed for young animals. However, he has given scientific backing to the old superstition that people who keep bees and eat honey live longer.

Parke, Davis in Foreign Markets

PARKE, DAVIS & CO. is reported as watching the foreign situation closely due to foreign restrictions on imports. While precise figures are not available, the company's foreign trade in the first seven months of this year was substantially above that of the same period of 1946. There has been no difficulty in obtaining permits to withdraw payments or profits from foreign branches. Also import licenses have been made available for all goods the firm has desired to ship abroad up to this time. However, some South American countries have hinted that they might tighten restrictions on import licenses. Columbia, for example, has suggested a year's moratorium on dollar payments for goods. But Parke, Davis is banking on the great need for drugs abroad as maintaining the trade. Also they are relying on the world-wide scope of their operations. The company has plants in England, South America, Mexico, Australia, and India. If imports from the United States are banned, many countries can be supplied from these foreign plants. A complete manufacturing unit is being added to the Rio and plans are ready for other locations when the time is right.

Drug and Oil Plant Conference

THE DRUG and Oil Plant Project of the California Polytechnic School is holding its 1947 drug and oil plant conference December 2 and 3, in the State Building in Los Angeles. In all, twenty-four papers are being delivered of which the following are on essential oils: Pine Needle Oils, California Bay Tree Oil and Thymol, History of the Essential Oil Business, Status of the Essential Oil Industry in India, Essential oils and Allied Materials Derived from Trees, California Sweet Basil Oil. Papers being delivered also include: Condiment Plants, Evaluation of Drug and Oil Plants, Castor Beans in California, Vitamin P from Citrus Fruits, Cactus Alkaloids, Allergies and the Production of Allergins, Pharmacy of Cascara Sagrada and Yerba Santa, Field Experience with Drug and Oil Crops. For those not in attendance at the conference, a copy of the proceedings will be available. Copies may be obtained from Monroe C. Kidder, Director, Drug and Oil Plant Conference, 257 South Spring Street, Los Angeles 12, California.

A.D.A. Drops Seal on Dentifrices

THE AMERICAN Dental Association will no longer give its seal of approval to dentifrices. For seventeen years the A.D.A. has set up requirements for "cleansing dentifrices," but the Council on Dental Therapeutics now says that it does "not feel that the granting of a Seal of Acceptance would continue to have the same value in the field of dentifrices that it does in the more important fields of local anesthetics and other dental therapeutic agents." The Council plans to examine dentifrices routinely and will publish reports of its findings as conditions warrant. The annual report on the status of dentifrices will be continued and will contain data on the composition of more widely used cleansing dentifrices and comments on the claims made for them.

Pneumonia Vaccine

SQUIBB is now offering a pneumonia vaccine which will immunize people for a period of from six to twelve months. The vaccine is made of the sugary coats, or polysaccharides which surrounds the pneumonia germs. There are 75 known types of pneumonia germs, but most of the pneumonia is caused by a dozen strains. Consequently the vaccine is made from this dozen. However, since children are often attacked by a different sector of pneumonia germs than adults, a special vaccine, differing from that for adults, is prepared for children. The vaccine, which has been proven on about 100,000 cases, is not effective against virus penumonia. In the Army Air Forces experiment, where 8,000 men were vaccinated, the pneumonia carriers—persons not sick but carrying pneumonia germs in large quantities, were greatly reduced. Pneumonia itself was practically eliminated.

New Bayer Aspirin Plant

THE Bayer Company Division, Sterling Drug, Inc., is now operating its new $2,500,000 plant in Trenton, N. J. devoted exclusively to the production of aspirin. The company states that this plant is capable of producing sixty per cent of the current United States consumption of packaged aspirin tablets. The plant, at which the aspirin itself is first manufactured from the raw materials, and then tableted and packaged for sale to the public, has an overall length of 340 feet, and ranges in depth from 170 feet to more than 200 feet. Receiving and shipping departments and a 280-foot warehouse extend along the full length of a 300-foot loading deck. The building is of steel frame construction faced on the exterior with buff face brick and continuous bands of sash and glass block.

Armour to Build New Plant

ARMOUR & COMPANY have purchased a 54 tract acre at Aurora, Ill., on which will be erected a plant for manufacturing vitamin preparations and other discoveries in the pharmaceutical field. The plant will consist of a group of brick and steel buildings in which will be employed at least 500 technicians and other trained staff members.

Streptomycin Exports Increased

SEPTEMBER export quota of streptomycin for September was raised by the Department of Commerce to 400,000 grams, from 300,000 grams for August. The September export quota represents almost half of August production of 873,449 grams, whereas the August export quota represented only thirty per cent of the July record production of 1,000,753 grams.

Lyons Tooth Paste—New Ingredients

LYONS Tooth Paste is now being launched by the R. L. Watkins Division of Sterling Drug, makers of Dr. Lyons Tooth Powder. The paste is based on an "entirely new formula which contains neither soap or chalk but includes a compound entirely new to the dentifrice field (aluminum hydroxide)." Dr. Maurice L. Tainer, director of the Sterling-Winthrop Research Institute, at which institution the formula was developed, describes the patented compound as "a novel application of microchemistry." He declares that it "polishes teeth 2½ to 5½ times brighter and four times faster than other known tooth pastes." Approximately 75,000 retailers, mostly drug stores, are receiving gift packages with three tubes in cartons attached a selling counter display—a sampling distribution, at a cost of $70,000, to assure complete national distribution when advertising starts. The paste is being marketed in three sizes at retail fair trade prices of 10 cents, 23 cents, and 43 cents. Orders are being accepted of $12 on Lyons Tooth Paste alone, any size in regular shipping cartons. The ten cent size of 85 cents a dozen, are packed for shipping in four, six, and twelve dozen lots. The 25 cent size at list price of $2 per dozen, comes in shelf containers holding two, four, and six dozen, while the 50 cent size, at $4 a dozen, comes in one, 3, and 6 dozen packages. To make comparative studies of the polishing action of dentifrices, an electronic apparatus was set up at the Sterling-Winthrop Research Institute. It was an adaption and refinement of the apparatus devised by the American Society of Testing Materials, to test the specular gloss of surface finishes. It comprises an intense light source, a lens system, a specimen holder, a phototube with amplifying circuit and meter. With the new polishing agent, described as "made up of particles of submicroscopic size, barely visible through a microscope," is combined a "soapless detergent" that cleans efficiently in hard water.

Now Winthrop-Stearns

WINTHROP Chemical Company exists no more since the parent company Sterling Drug, Inc. has merged its two subsidiaries Winthrop and Frederick Stearns & Co. into Winthrop-Stearns Inc. as "a new subsidiary to integrate the major pharmaceutical interests in the United States of the parent company."

Chemical Exposition Sold Out

THE CHEMICAL Exposition, scheduled for Grand Central Palace, New York, December 1 to 6, has sold out every foot of space on the four floors of the Palace to 350 exhibitors.

Admits Confusion

WE ADMIRE the frankness of Dr. Carle M. Bigelow, Calco Chemical Division, American Cyanamid Company, in his opening remarks at the Round Table Discussion at the recent annual meeting of the Drug, Chemical and Allied Trades Section of the New York Board of Trade: "Any individual who can say with certainty that he has a clear concept of American, or the general world economic conditions, today, is fortunate. Personally, I am completely confused by the plethora of pros and cons expressed on practically every phase of the economic situation." After admitting his own lack of understanding, Dr. Bigelow continued:

"Certainly we cannot look to the pronouncements of our own government as being irrefutable. Immediately, after the war, the Federal government insisted that there was going to be a marked rise in unemployment, which could only be offset by an increase in wages. We all know that the subsequent period was one of the highest employment in our business history and, taking advantage of a definite shortage of labor, wages were driven higher than was warranted by the rate of production, which was drastically lower than our prewar standards. This has resulted in marked price increase, but the administration tells us that this is all the fault of poor business management, and throws its influence toward an even higher wage scale."

Domestic Quicksilver

BEFORE a Congressional subcommittee last month, S. H. Williston, vice-president and general manager of the Codero Mining Co., Nevada quicksilver producer testified that the Italian-Spanish cartel, controlling most of the foreign mercury production, was dumping the metal on the domestic market at New York prices below domestic cost. Other witnesses told the committee that marginal zinc, copper, and lead mines were closing because of the pocket veto by President Truman of a bill to prolong the government's wartime premium price plan for marginal producers of strategic minerals. Mr. Williston said that he and others, including Herbert Witt of Oregon and Idaho, and Worthen Bradley and Gordon Gould of California, comprised 98 per cent of the operators of the nation's quicksilver mines.

It has long been the history of quicksilver that when prices start rising and climb to $100 or more per flask, the marginal producers in this country start operations. It has been the history of quicksilver that when prices start declining and descend to about $81 dollars or less per flask—which is the market today—these producers cease operations. Those interested in quicksilver probably want some legislation or some Governmental action by which they can continue to produce quicksilver and make a profit no matter how low the foreign declines. Those interested in zinc, copper, and lead in this country probably want similar action taken with regard to their markets.

We have been reading quite a lot of articles to the effect that this country has long been becoming a "have-not" nation with regard to strategic metals, minerals, and oil. We have also been told on many occasions that this country is due for a serious depression when dollar credits run out abroad. We have often expressed the opinion that our metals, minerals, and oil could be conserved, and dollar credits abroad built up to aid our export by importing metals, minerals, and oil from foreign countries. We have also, on many occasions pointed the stumbling block to this easy way—the opposition of the owners of metal, mineral, and oil deposits in this country who would not be able to profit—except in a time of national emergency if such a course were pursued.

Sanitation Causes Epidemics?

THE theory that certain countries suffer seasonal epidemics of infantile paralysis because of a lack of early-life exposure to the virus due to modern sanitary conditions, and that certain others escape epidemics because of primitive sanitation, was advanced by Dr. Robert Ward to a conference of poliomyelitis experts meeting at the Georgia Warm Springs Foundation. Stating that the virus of the disease has been found in human waste products, in sewage, and in flies, Dr. Ward declared:

"In countries with primitive sanitation (like Palestine, Egypt and Japan) virus is widely disseminated and the infant comes into repeated contact with it at an early age . . . But . . . immunity develops early in life in a majority of individuals. In areas where modern sanitary conditions prevail, early repeated exposure to virus is not the rule, and populations arise susceptible to disease in epidemic form."

He said on indication of this is the fact that in Palestine and Egypt, poliomyelitis largely is a disease of infancy, whereas in countries like the United States, Scandinavia and Australia, older people are attacked as well.

"Although poliomyelitis is world wide in its distribution," he said, "epidemics have been largely limited to certain countries—such as Scandinavia, Holland, United States, Canada, Australia, and New Zealand, and these have arisen within the last sixty to seventy years. In certain other parts of the world (Middle East) there may be almost as much poliomyelitis, but large seasonal epidemics seldom occur to attract attention."

While Dr. Ward may be correct in his hypothesis, he poses a question as to whether or not children should be exposed to contagious diseases of childhood. There are many doctors who advise throwing children together after one child has contracted the measles or some other childhood disease. However, we are of the firm opinion that still higher orders of sanitation are the answer, with serums and vaccines to wipe out any possibility of epidemics of these diseases.

Fire-Fighter Jim

JAMES J. McINNES Jr., Commercial Solvents Corporation, and last year's president of the Salesmen's Association of the American Chemical Industry, will receive new honors on November 6 when he will be inducted as president of the Southern New York Volunteer Firemen's Association. This association includes the volunteer fireman groups of the following nine counties: Suffolk, and Nassau (Long Island), Kings (Brooklyn), Queens, New York (Manhattan), Bronx, Richmond (Staten Island), Westchester, and Putnam. Since Kings, Queens, New York, Bronx, and Richmond counties comprise the City of New York which has not allowed volunteer firemen to fight fires for many long years, only four of the nine counties actually have active volunteer firemen. However, the five counties of New York City have very strong and influential organizations of former volunteer fire fighters, and they comprise an important part of the political workings of the Southern New York organization as well as of the State organization.

Jim is an old vamp from Syosset, Nassau County, Long Island. By hard work and excellent attendance at the fires which occurred when he was not selling alcohol or working in the interests of the Salesmen's Association, he rose to chief of his local fire company. Later on, he was elected a fire commissioner for his district. Years ago, when Jim was somewhat younger and working his way up in fire-fighting circles, we published a story relating how Jim told that when the fire engine slowed down to sixty miles an hour, he would jump off with the hose to attach it to the hydrant. Jim denied this story, stating that he never jumped off at sixty miles an hour, but waited until the engine slowed down to forty miles an hour. However, Jim now feels that forty is a little fast for him at his age, so still to get excitement and hard work out of his hobby, he is now active in the political angles of the fire-fighting game.

Incidently the induction services for Jim will be held from 8:30 P. M. to about 6 A. M. at a semi-snooty joint called Sunrise Village, on Sunrise Highway, Bellmore, Long Island.

Decline in Vitamins

WE HEAR that the business in vitamins is showing a real decline. We are told that sales of synthetic vitamins by at least some producers have declined at least thirty per cent within recent months. Why this should be so, we do not know, but numerous explanations are given. But the explanation which seems most reasonable to us is the fact that practically all of the sellers of vitamin preparations who advertised to the public via radio, magazines, newspapers, and other media, have abandoned the field and left the business up to the ethical drug manufacturers who advertise only to the medical, dental, and pharmacy professions. Not that the people who advertised to the public had any great share of the business. When they started to quit, it was estimated that the seven largest of them together had only twelve and one-half per cent of the business, while it was estimated that one ethical manufacturer alone had twenty-five per cent of the business. But the advertising done by those who advertised to the public apparently built up public demand for vitamins, and the people in whom the demand was built up apparently bought mainly from the ethical manufacturers. Now without this public demand being built up by direct advertising to the public, the sale of vitamin preparations is suffering and the ethical manufacturers are now feeling this decline. Other explanations given include the possibility of working down inventories of finished preparations by manufacturers, wholesalers, and retailers, as well as the working down of inventories of the synthetic vitamins themselves by the manufacturers.

Vending Machine for Vitamins

SIX cities are reported ready to test a new compact "Vitamin Vendor." The machine will hold 200 capsules in a cellophane strip of One-A-Day vitamin preparations made by Miles Laboratories. One capsule is dispensed for a nickel.

Taxation and Research

EXCESSIVE taxation is damming the stream of investment capital necessary to support research in industrial and university laboratories, American Cyanamid Chemical President William B. Bell told the Medicinal Chemical Section of the American Chemical Society last month. In two or three years it will be virtually impossible for industry to obtain the funds needed to develop new and improved products, he said. Other thoughts of Mr. Bell are: Personal incomes below $10,000 cannot be relied upon to provide venture capital for new enterprises because it has been shown that eighty per cent of these incomes are spent for current needs. Excessive taxes on the higher income brackets have made unavailable the only potential source of fresh private capital, and high corporation taxes have made it difficult for industry to use its own profits for expansion and development. The net effect is to throw research into government and military laboratories, which have not yet demonstrated that they can handle the work efficiently. Development of atomic energy, usually credited to the government and military, was in reality largely accomplished by scientists from universities with the help of industrial organizations. There are some who think that research should be government controlled, but these are chiefly men who have little faith in private enterprise. Their point of view is not sustained by the enviable record of industry, which has sponsored so many products which have contributed to the welfare of the human race. "We must not kill the goose that lays the golden eggs," concluded Mr. Bell, asserting that industry and individuals must be allowed to retain enough surplus capital to support research projects and to endow colleges and universities so that the next generation of scientists may receive ample training.

Dental Technicians Meet

NEW developments in dental laboratory techniques were presented to more than 3,000 dental technicians from all sections of the United States and Canada at the National Education Congress sponsored by the Dental Laboratory Association of the State of New York October 11 to 13 at the Park Central Hotel, New York.

Leonard Darvin, executive secretary of the association pointed out that the congress provided the first opportunity for many dental technicians to take complete courses in various phases of denture construction.

They Should Complain?

MANY manufacturers of cosmetics today are complaining about conditions in their industry. They feel that the bottom has dropped out of everything and that they are doomed. We ask these people to glance at the chart of Sales of Cosmetics which appears in every issue of this magazine. It is true that the sales of cosmetics leveled off at the beginning of this year and have shown a very slight dip below the high point registered during the latter months of 1946. However, we ask these people who are complaining about the decline in their business volume, did they ever expect to do so well as they did in the several years which preceded this leveling off? In all fairness we ask these complainers to compare the volume of cosmetic sales today with the volume of these sales before the war and then answer truthfully whether or not they are well off. Our chart shows that since 1939, the volume of sales of cosmetics at retail has more than doubled, in fact it has been multiplied by 2.6. How in heaven's name can anyone truthfully complain about his business with such a growth as this? Anyone who expects such a sharp growth to continue indefinitely year after year must not have the slightest knowledge of past history. There is no reason why sales of cosmetics should not increase to still greater heights than were recorded last year, but a leveling off between the years of growth is not uncommon in any industry and is more or less to be expected.

"From Sandalwood to Ant Eggs"

"FROM Sandalwood to Ant Eggs" is the title of an article written about S. B. Penick & Co., by J. D. Ratcliff in the *Saturday Evening Post* of October 11. The wide variety of botanicals imported, exported, and cultivated by the company is described together with the need for scouts in all parts of the world to keep the firm abreast of developments which may materially affect market conditions. Also the great need for secrecy in this particular business is given. Penick's place in gums, insecticides, essential oils and perfume compounds is related. Although the company is privately owned and publishes no annual report, Mr. Ratcliff says: "The best guesses place assets values at $10,000,000 and annual business far above this figure. The company has five manufacturing plants, a research laboratory with thirty workers, and a total of 700 employees."

"To survive and grow in this business . . . one needs a special kind of business acumen," says Mr. Ratcliff, "The successful man has to be a razor-keen trader. He has to maintain a steady flow of information on world requirements and supplies of hundreds of drugs. He must keep abreast of medical advances which will destroy the demand for one drug and skyrocket demand for another.

"Sydnor Barksdale Penick probably comes closer to fulfilling these requirements than any other individual. He is a middle-sized, rather courtly man of sixty-five. He wears well-cut suits of conservative fabric—usually black or dark brown. As a rule, he wears stiff collars. He has a formal, correct business manner more often associated with the nineteenth century than the twentieth. His office is furnished with solid, leather furniture and has a grandfather's clock."

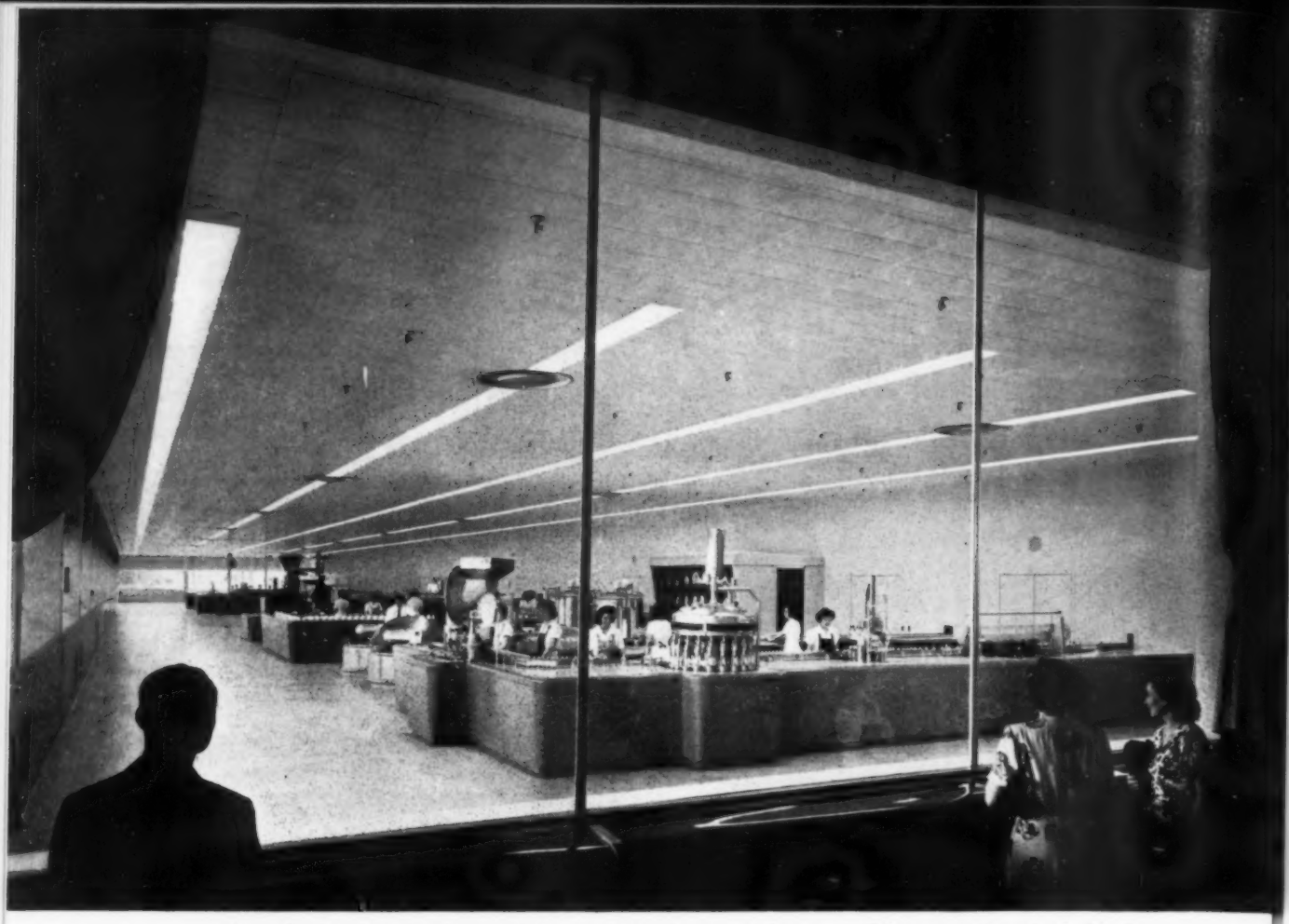
"For anyone wanting to go into the perfume business," says Mr. Ratcliff, "Penick can supply more than 2,000 perfume formulas, and can also supply the ingredients."

Alcohol Production Off

ALCOHOL production during the fiscal year ended June 30 totaled 248,897,421 gallons, which was 24.5 per cent below the production of the previous year. Output of methanol for the same period totaled 268,278,000 pounds, compared with 226,427,000 pounds in the previous year. Production of synthetic methanol during the first six months of 1947 was 18 per cent above the figure for the same period of 1946, and exports were down 42 per cent.

Fluorine Lessens Tooth Decay

ADDITION of fluorine to the water supply of Newburgh, N. Y. has resulted in a marked decrease in the susceptibility to tooth decay, according to a report of an experiment being conducted by the New York State Board of Health. Results of the experiment, which is still continuing, were given by Dr. Sydney B. Finn and Dr. David B. Ast, of the Department's Division of Maternal and Child Health. The experiment is being made in Kingston, N. Y. as well as in Newburgh since both cities are about the same size with populations of about 30,000. The cities are thirty miles apart. Fluorine was added to the Newburgh water supply, but Kingston was left unchanged to give a basis for comparison. In Newburgh, sodium fluoride was introduced into Washington Lake, the source of the city's water supply, at the rate of one part to 1,000,000 parts of water. Individual lactobacillus counts were made on random samples of the Newburgh school population in 1944 and again in 1947. Similarly, the Kingston children were tested in 1946 and 1947. For the purpose of the test it was agreed that a count of 20,000 germs per cubic centimeter or more was the danger point for tooth decay, while a count of less than 100 meant immunity. In Newburgh, at the outset of the experiment, the sampling showed that 63.5 per cent had counts of 20,000 or more and 11.9 per cent were negative. A similar analysis early in 1946, or roughly a year later, showed that the percentages stood at 55.2 and 15.4 respectively. A similar analysis this year showed that 47.3 per cent had high counts and 20 per cent registered negatively. Similar tests of Kingston children over a similar period showed no appreciable change.



A production line in the new baby products plant of Johnson & Johnson at Cranford, N. J.

Cosmetics Are Big Business

WHEN an industry doubles and redoubles its sales, there can not be much doubt about the popular acceptance of its product. However, to be of real value to the nation's economic life an industry must give more than just its product. It must make a contribution to the well-being of every one of its citizens. It must give as well as take.

What is the contribution that the cosmetics and toilet goods industry is making in support of the national economy? What does it return for the $850,000,000 which the American nation has spent during the last year on its cosmetics and toilet goods counters?

Because more recent figures are not obtainable the answer must largely be an estimate. But, even an estimate made upon the basis of incomplete and subject-to-later-verification figures brings ample proof of the substantial size of the industry's contribution to national income and broad economic activity.

A population of 143,311,000 Americans paid 66.6 cents each in cosmetic excise taxes during the business year ending June 1947, $95,542,308 in all. This is just a few thousands dollars less than the year before but a tidy sum giving joy, no doubt, to Commissioner George J. Schoeneman of the Bureau of Internal Revenue and supplying the evidence that Americans think well of their cosmetic industry to pay so much for the privilege of giving it its patronage.

But to get at the roots of this question of this interlocking relationship of the cosmetics and toilet goods industry with the remainder of the nation's economic structure we must turn back to the years before the war.

In 1939, the last year for which detailed figures are

available, the cosmetic industry employed 10,363 wage earners. This placed it rather low in ranking among the employers of labor; unjustifiably, though, because of its considerable effect upon general employment among other groups of producers and distributors, as will be shown in a short while. Even so, it is interesting to note that the cosmetic industry as an employer ranks along-side such industrial employers as the house furnishing industries, the producers of children's dresses, makers of costume jewelry and similar ones.

To manufacture the $356,700,000 volume of toilet goods and cosmetics which were sold at retail in 1939, the industry bought raw materials costing $58,509,926. Its total annual production amounted to $147,465,685. To place these figures within the frame of the total national economy it is interesting to note, that the material purchases of the cosmetic manufacturers equalled practically those of the American electrical appliance industry and were only slightly below those of the women's and children's underwear industry. Indicative of the already then established importance of the cosmetic industry as an industrial producer, certainly, is the fact that its factory sales were just only slightly lower than those of electrical appliances.

If the importance of an industry for the national economy can be measured by the manner in which it uses the products of its sister industries, its competitors for the consumer's dollars can hardly complain. The average per worker consumption of bought materials for use in production was $4077 in 1939 for all American industries; the cosmetic industry utilized materials valued at $5,646 for each of its workers. Moreover, while the average value of production for each American worker amounted to $7,208, the cosmetic industry turned in the very satisfactory figure of $14,230. The retail value of one worker's production reached $34,420.

Of course, the cosmetic industry is one of those groups of industries which, by the nature of their production, are adding heavily to the value of the raw material during the process of industrial refinement. One hundred and fifty-two per cent were added to the value of the bought materials between their entrance into the factory and the finished product. The one dollar, spent for materials, produced $6.09 as the product sold at retail over the nation's toilet goods counters. The profits of distribution and retailing above the factory price of the finished cosmetics amounted to 142 per cent.

It is difficult to make a comparison of these figures with those of other industries, primarily because few industrial groups present such a clear picture for an analysis as does the cosmetic industry. However, the following figures for men's and boys' suits and clothing will serve probably as well as any other. The "spread" between the cost of the materials and the finished product of this industry amounted to 63 per cent plus, in 1939, that between the cost of materials and the retail price was 431 per cent.

To apply 1939 conditions to those of today, in an attempt to reach some conclusion as to the present economic relationship of the cosmetic industry to the all-over economic structure of the nation, may not be the best way to arrive at the facts. It is the only one available, however, right now and must remain so until a new census of industrial production becomes possible. At any rate, the result can not be so far wrong as to preclude making it the basis of at least a more general appraisal.

Employing the same statistical proportions as those found during 1939 to last year's annual sales of cosmetics of $850,000,000, this would imply that the cosmetic industry gives work today to approximately 25,000 persons. The industry's expenditure for materials should be about $140,000,000; the value of its product at wholesale price $355,000,000. It is quite possible that these figures require adjustment. Labor in the cosmetic industry is more productive today than it was eight years ago. This may either indicate a lower employment rate than the one statistically arrived at, or a higher product value. Raw material prices have not risen equally for all materials purchased by the industry. However, the average will be fairly near the calculated figure. Worthy of mention, however, is the fact that, while the value of industrial production of consumer goods for all of the United States has risen 62 per cent since 1939, that of the cosmetic industry rose 141 per cent approximately; on the basis of its retail sales. The cosmetic industry expanded more than twice as fast as did all the industrial activity of the nation.

Allowing for an approximate wage expenditure of 20 per cent of the factory product-value of the cosmetic industry (although this figure may be too high in some instances and possibly lower in a great many others) wage payments by cosmetic plants should have reached approximately $71,000,000 in 1946. Besides these, the cosmetic manufacturers should have earned near $28,000,000 in wage payments for the workers of other industries from which it purchases its materials and supplies.

The average payment of salaries to the employees of the retail stores selling cosmetics was 5.1 per cent to sales, according to the analysis of the N. R. D. G. Association's Controller's Congress, in 1946. On the basis of retail sales of cosmetics of $850,000,000 during this year this gives sales salaries of $43,000,000 paid to toilet goods counter personnel in department stores alone, as another contribution to wage income by the cosmetic industry. Thus a total of earnings of $142,000,000 from just these three sources

Nevertheless, these earnings are large enough to keep over 35,000 families at the comfortable income level of $4,000 a year, but supports, most probably, directly or indirectly more than three times this number. Roughly speaking, three out of every one thousand American families are benefited by the growing prosperity of the cosmetic industry in one manner or another.

Turning from these more general aspects of this give-and-take relationship between the cosmetic industry and the all-over economic life of the nation to the

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Parenteral Drug Enforcement

By GEORGE P. LARRICK*

A FEW WEEKS ago we received a report of an investigation which is interesting because it illustrates what unusual problems may arise in the regulation of medicines offered for injection. A Food and Drug inspection station on the West Coast received a complaint from a physician who asserted that his patients had been injured by a medicine intended for the treatment of arthritis.

It appeared from the preliminary investigation that a number of different detail men were selling the product because different physicians reported that individuals of different names had sold the injection to them. Their patients complained of severe pain, fever, and temporary paralysis. Analysis showed that the product was an alkaline, polysulfide solution, quite unsuited for injection, and that it was not sterile.

We began an extensive investigation and learned that it had been sold in six western states. Although a variety of names were used by the salesman, in each instance he was described as a very fat, bald man, who wheezed and puffed when he talked.

It thus became evident that only one salesman, but one who employed a number of aliases, was involved. The packages of the medicine bore addresses in California and in Chicago. These were fictitious.

Warning notices were inserted in various medical journals. This did not, however, stop the promoter. Some weeks later one physician notified us that the man had called at his office that day. The inspector who immediately proceeded to the city involved found that the salesman had called upon a large number of doctors in that vicinity during the past few days and had sold several hundred dollars worth of the injection.

He was still not easy to find. He apparently had no hotel address in the immediate vicinity. The inspector, who had to guess whether the man had gone North or South, followed his trail by calling on doctors and inquiring whether or not a salesman of the description involved had visited them. He found many physicians whose offices had been visited in recent days or weeks.

In one small community, for example, six physicians had purchased from $9.00 to $180.00 worth of the product. One physician had been offered a special bargain. The detail man asserted that because of his urgent need for funds he would sell the doctor 100 bottles for $150. The physician welcomed the bargain and gave the salesman his personal check. The check was cashed but no medicine was delivered.

This evidence was promptly communicated to the competent local district attorney who swore out a warrant on the charge of obtaining money under false pretenses.

The Food and Drug inspector learned from a physician's office girl in a nearby town that she had seen the salesman sitting in the lobby of a small hotel. Investigation showed that the man had stayed there under an assumed name but that he had left. The trail led to another hotel in another city. The inspector and a de-

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tective from the local police department found the salesman. In his room were bottles, stoppers of the type used as closures for parenteral medication, packages of labels, and the chemicals from which the drug could be made. It become clear that this salesman traveled from place to place, bought his raw materials at corner drug stores, and proceeded to manufacture the medicine for intramuscular injection, using the tap water in his various hotel rooms.

At the moment it does not appear likely that interstate commerce can be established, but we have every reason to believe that the capable local prosecuting attorney in the county where the salesman is now languishing in jail will put this man out of circulation.

Fortunately for the legitimate parenteral drug trade and for the Food and Drug Administration incidents of this character are rare. Obviously, it is to the advantage not only of the general public but of the industry as well to have such unscrupulous and highly dangerous merchandising stopped.

The plan of the Food and Drug Administration in its program of enforcing those sections of the Act which deal with parenteral drugs is based on the systematic inspection of parenteral drug firms and a systematic sampling of the products shipped in interstate commerce. More and more emphasis is being laid upon the manufacturer's plant controls. The program has been deliberately designed to exert pressure to bring about the installation of modern control systems which will be administered by competent personnel in those drug manufacturing establishments that lack these facilities in any degree.

Some years ago cases brought in the courts on charges that drugs were not of the identity, strength, quality, or purity required were usually considered to be of much or little seriousness depending upon just what relationship there was between the variation and the physiological effect of the drug. In other words, if the product was dangerous or if it was substantially lacking in some important therapeutic ingredient, the case was regarded as serious by the courts. On the other hand, if the variation did not cause the product to fall in one of these classes, the offense might be regarded as technical and perhaps as trivial. The trend in recent years has been to evaluate the case not only on the basis of the harm likely to result from public consumption of the article involved but more particularly as one yardstick to appraise whether or not the producer has surrounded his operations with safeguards in keeping with modern knowledge.

In our enforcement operations we undertake to advise the United States attorneys, and through them the Federal courts, of the significance of individual violations in terms of the controls exercised by the manufacturer.

In a number of jurisdictions the courts have adopted the view of one Federal judge who asserted that, "public policy casts upon those who introduce * * * drugs * * * into interstate commerce the duty of rigid inspection. They are charged with absolute responsibility for proper handling of their products. Public safety demands of them not only extreme care but definite assurance of the quality of their products."

It is obvious that of all products subject to the terms of the Act drugs for parenteral administration require the highest degree of technical control and by the same token it is the obligation of the Food and Drug Administration to subject the manufacturing and laboratory controls to the closest scrutiny. Our plan of operation provides for systematic coverage of all firms engaged in this business.

We have sought to staff our inspection force with individuals who have the necessary background to become expert in appraising the over-all effectiveness of control procedures utilized in individual plants. We are glad to report that the trend in recent years has very decidedly been in the direction of much better controls, but we still receive reports of flaws in control systems and of errors in manufacture which escape detection because of these flaws. It is our view that the disposition of drug firms generally to pool technical information involving improvements in control systems should bring about progressive advances and thus continually lessen the likelihood of serious errors in manufacturing, packaging and laboring.

We have observed wide differences in the extent of controls exercised by different firms. Some invariably obtain guarantees under the Food, Drug, and Cosmetic Act for each raw material which they purchase. They are not, however, content to rely upon these guarantees but supplement them by a careful, planned, well-organized analysis of each raw material. Some few firms obtain guarantees upon a haphazard basis and may or may not subject the raw materials to competent analysis.

I recall a recent case where a well-known firm had been systematically analyzing a particular raw material for some years. It had never found any fault with the material. On one occasion when the laboratory was overburdened with work, a lot was not analyzed. It just so happened that this lot was faulty and that a shipment of the finished product was sampled by a Food and Drug inspector.

The saving effected by failure to analyze the raw material was certainly more than outweighed by the financial and other loss occasioned by the removal of large stocks from the market.

Some firms meticulously review their control systems at periodic intervals. They give particular attention to the question of whether or not the types and kinds of analytical procedures employed are keeping pace with the latest developments in the field of science involved. In a number of instances serious errors have occurred because obsolete, perhaps rapid, analytical methods were used when more accurate methods were available but were not employed by the control chemists.

From time to time violations of the law have occurred because in the analysis of the finished products not all of the drug ingredients were accurately determined in

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AMBERGRIS IN PERFUME EXTRACTS

By VICTOR HASSLAUER*

The laboratory assistant at the right is holding a piece of ambergris that is valued at more than $8,000, while the chemist in the picture below is shown carefully measuring out a rare perfume.

BRITISH COMBINE

IF WE WILL observe and remember we will find that at present certain perfume extracts sold to the trade have no longer, in many cases, the qualities of finesse, originality and distinction they had in the past.

Fifty years ago, to create an extract consisted in reworking the set of natural products one possessed and to mix all these elements in a new way letting some of the elements dominate in order to obtain a new note. Tinctures, vanilla, tonka, civet, castoreum, musk, ambergris were largely used and in this manner a real polish was obtained which caused the other constituents of the extract to adhere to the skin or the material worn.

Later on chemists produced synthetically certain constituants of natural essences which were discreetly introduced in the preparations. Then starting from definite compounds existing in the essences, other preparations have been made having a new note. For example: Ionone has been introduced in perfumes having a note of violet. Ionone has given a great strength and a new tonality which is not far distant from the violet perfume.

At present, laboratories have become factories of synthetic products, research has been done methodically and new products have been created unceasingly. Competition is getting eager and the price of these products has been reduced leaving a very small margin of profit. In order to make a living and pay for the often long and fruitless scientific researches, the manufacturers have retained as much as possible the secret of the new products found in their laboratories. These products have been mixed with others which were chosen in such a manner as to render the identity difficult and are sold as new essences. Some manufacturers have also created synthetic floral perfumes in whole or in part. Some have even gone further and they have created concentrated extracts which can be simply dissolved in alcohol to obtain a liquid ready for sale.

The perfumer who is anxious to create products within an original and distinguished note has found himself in a new position. In one way, his palette has been enlarged by new elements, the combinations of which have been innumerable. Business becoming more and more difficult, the solution to the problems set before the perfumers can no longer be solved without the manufacture of beautiful products. The creator must exercise his talents so as to present agreeable, distinguished, original and tenacious products. He is, therefore, reduced to use again the notebooks of his predecessors and to inspire himself with the tendencies of the moment. Unavoidably he will return also to the use of tinctures and he will use tinctures of vegetable products as well as tinctures of animal products. Amongst the latter, the outstanding ones are musk, civet, castoreum and ambergris. As far as musk is concerned, everyone knows that the pod is quite vulnerable and that the Chinese have acquired the art of opening the pods and modifying the contents.

Ambergris, however—although because of its value it has often tempted adulterators—as a general rule is a product which least of all is subjected to adulteration. This is because the exterior aspect of ambergris, as well as the formation of it, is very peculiar. It is, therefore, extremely difficult to sophisticate or falsify ambergris without fear of discovery by the practiced eye. Besides, it is very easy to ascertain the purity of the product by burning a small part of ambergris on a hot plate! The odor is very distinctive and no product can replace the perfume which it discharges when burning.

On the other hand, the different lots available on the market are so varied in quality that the difficulty lies in the search for interesting lots. In order to assist the perfumer in this task, we are giving a few indications concerning the origin and the properties of ambergris. This, in order to show what can be expected from tinctures, what price should be paid for a good product and the quantities that should be used to obtain an extract which will have the beneficial properties of this wonderful fixative. Ambergris is a product of animal origin. It comes from a marine monster, the sperm-whale. The sperm-whale generally lives in small groups. He travels great distances in the ocean, searching for food, often consisting of a school of fish which he pursues and devours entirely. His favorite meal consists of certain shell fish, octopuses, squid, etc. which can obtain great dimensions. These are all armed with tentacles and suckers. When the whale and the octopus of great size meet a battle starts. If the bottom of the sea is low, the octopus grabs his prey, covers it completely with its tentacles, sucks its blood by hundreds of suckers and the whale exhausted by great loss of blood and also probably doped by the secretion of the suckers, finally dies. On the contrary if the sea is not deep, as soon as the octopus attaches itself to the whale, the whale drops to the bottom and its weight crushes his gelatinous adversary. The octopus is immediately devoured but after that, it has to be digested. Very little is known about the circumstances in which ambergris forms. It is, however, noted that the musk odor which it discharges also exists in the octopus; it would therefore seem that a certain part of the octopus escapes digestion. Such a large mass of animal substance has to be painfully digested; the liver must work excessively and becomes deformed, consequently stones appear. On the other hand, whales also devour other types of sea life such as cuttlefish which have a horny beak. This hard portion of the fish resists the acids of the stomach. It is known that in the animals for which regular nourishment is not assured the large intestines chew the food without releasing the product of the digestion in order to permit the absorption of the very last assimilable portion. In the pit of the colon and of the coecum, the mixing takes place and an amalgamation is formed which consists of the crystalline part of the hepatic calculus and the paste deriving from the non-digestible part of the octopuses and the solid matters which have not been touched. In normal times the stercoraceous matters carry away the entire insoluble mass

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but in the case of frequent disease, hard kidneys are formed which are inclined to thicken by a process of adhesion. These kidneys can weigh from a few grams to a hundred kilos. These masses are expelled irregularly and float on the sea, they can then rapidly be driven to the coast or sometimes float during a more or less lengthy time before being found by navigators and fishermen who cover the seas with the intention of capturing the whales.

On land those seeking ambergris have found ample supply on the Asiatic coast of the Pacific, the Persian gulf and the Arabian coast. They have sometimes found stones thrown up by the sea a very long time ago, maybe even centuries ago, and time has changed these stones into a white friable matter having a perfume of exquisite finesse which is considered as the most perfect type of white ambergris: this is the (ambre blanc) or fossil ambergris. It literally falls apart in dust but its odor is extremely fine. This kind of ambergris is very much sought after as an aphrodisiac by orientals who highly value it. It is also said to be used in hot coffee. Ambergris is also highly esteemed in the Indies and in the Moslem countries where a current legend claims that ambergris has the power to extend the span of life. Some maharajahs possess a treasure in ambergris and use it for their personal consumption as an aphrodisiac or to make perfume. In Egypt some manufacturers of cigarettes use it in their tobacco. In almost all countries of the world which are bordered by the oceans, it is possible to find ambergris for the whale is a migrating animal which travels enormous distances in its search for food.

The size of a stone found in the intestines of a whale varies from a few kilos to several hundreds of kilos. In 1912 we ourselves had the opportunity to examine a stone in one single piece weighing 160 kilos which was sold by us at that time to a London firm. In 1937, we received a stone weighing 300 kilos. In 1898 one of our correspondents had in his possession a lot of 190 kilos. However, these lots are exceptional. Generally, the stone or stones found in the animal have a more or less spherical shape, others are in the shape of a cone, according to the part of the intestines or the stomach in which the stone forms. The stone, or stones, is generally composed of encircling layers, sometimes very tight and other times with a slight interval between these layers. In this last case, the spaces are generally filled with a black soft paste and in the center of these layers, one nearly always finds a kernel in the heart.

The stones are sometimes numerous and vary in size from that of a chicken egg to that of a large ostrich egg. Other times also, only a single stone is found but this stone is formed by an agglomeration of several kernels which tends to show that this formation represents the soldering of several stones. The exterior of a stone generally varies in color from deep black or golden yellow to a dark or light gray. The inside is generally lighter than the exterior crust.

In former years, Ambergris was considered by the maharajahs as precious as gold and pearls. It was kept as a reserve treasure in large caskets. It has been possible to obtain ambergris from this origin which the long period of conservation had refined.

The buyer who wishes to acquire lots of ambergris should know that the qualities are extremely variable. Due to the fact that it is influenced by various factors such as the dimension of the whale, its diet, its more or less morbid state, the time taken by the calculus for its formation, the time elapsed since its evacuation and the conditions in which it has been formed. With a little experience it is possible to recognize between ten different stones, the one that will have the strongest tincture possessing a fresh and agreeable note.

In principle, you can find in the odor of ambergris four elements which constitute the essential of this product: first of all, a slight odor of the tide recalling the marine mustiness which can be smelled on high seas and which is not the same as the odor at the costs. Secondly, an indolent note recalling the infectious smell of stercoraeous matters. Thirdly, a finer note which can be compared to the odor of tobacco especially that of certain cigars and to that of the interior of a church: a mixture of incense and moisture. Finally the most important part is a sort of musk mustiness which is evidently derived from the octopuses or mollusks of the same type in which this odor already existed. To view the principal qualities which are generally offered, we find that in black ambergris the musty odor predominates. This is because it is still close to the excrement and has not been refined. The color is darker, the tincture is very colored and the perfume is coarse but strong. Certain varieties of light color and ambergris are more or less odorous. This ambergris is less interesting because the tinctures are weak and not tenacious. In principle, it is best to choose the qualities in which the odor is not too indolent. The marine mustiness must be present without being too acute. A small note recalling the odor of tobacco can be present and, finally, the musk animal note recalling that of the sea-urchin can be favorably accepted. This is approximately what is found in ambergris which has been floating and also in the stones which have been for a long time in the Asiatic caskets.

To make a test of a lot of ambergris, it is sufficient to take a small quantity of the various stones to break up very finely these pieces and to dissolve one gram in 14 cc. of alcohol at 96°. After two or three days, the tincture can be examined. A blotter is dipped in the tincture and should be allowed to dry. The odor should not to be feculent after 12 hours. The perfume of the ambergris should be in full development and it should persist for several days. To prepare the tincture, the ambergris should be crushed, then it is pulverized with a mortar. If the ambergris cannot be pulverized because it is sticky, it is necessary to use a hard object to divide it. In principle, the tincture is made in the proportion of 25 grams of ambergris to one liter of alcohol. For example: to treat 1,000 grams of pulverized ambergris, the powder is placed in a container with a large

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Continued Expansion of The Industry

SOME MANUFACTURERS of drugs and cosmetics have arrived at the point of view that this industry is going to grow in all directions. That is, they are of the firm opinion that the demand for both drugs and cosmetics is going to rise to still greater heights, with possible temporary set-backs which mean nothing in the general direction upward. Some of these people see continued upward trends in all divisions of the industry, although others only see gains in certain branches. In previous articles we have explained the reasons for the predictions that demand for drug products will continue to grow. These have to do with the greatly increased number of specifics which are now available and, therefore, with the greatly increased number of diseases treated by physicians with drugs. Also it has to do with the great increase in the use of vitamin preparations over the years—which is now said to be receding—and with the future of amino acid preparations and other products which are expected to be developed into very wide-selling and widely-used products.

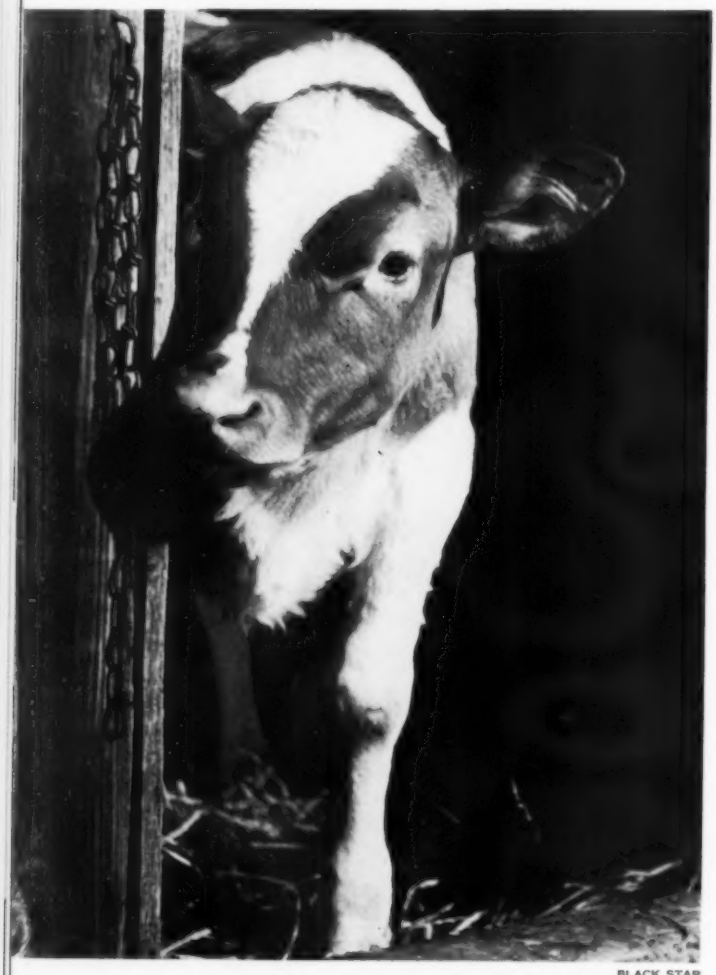
It appears that the great growth in the drug branch of this industry will continue to be in the ethical division rather than in the division of products advertised to the public. This for the reason that the new products being constantly introduced to the market are in the very large majority preparations which are the result of intense research by manufacturers into the treatment of specific diseases. Also the new preparations being developed through this research must all be supported by real clinical data carried on by the medical profession in hospitals. Work of this kind is essential if the manufacturer is to be allowed by the Food and Drug Administration to introduce his new product to the market. With the results of this research in hand, the natural place to use it to promote a new product is to detail the doctor with it. Certainly, data of this kind cannot mean much to the general public, and it does not lend itself very well to the creation of advertising copy which would appeal to the public. Perhaps certain of these preparations could be advertised to the public at a later date when the public, to a large extent, had become acquainted with the product through widespread recommendation of it by the medical profession. But in such cases the preparation would have to be one which is used in the treatment of widespread conditions which lend themselves to self-medication. And the very large majority of products being introduced by the manufacturers as the result of this research are for specific conditions which must be, or generally are, treated by doctors. For these and other reasons, it appears certain that the rate of growth in the ethical division of the drug manufacturing industry will continue to be much greater than the rate of growth in the proprietary division.

The cosmetic branch of the industry is expected to reach new heights for the reason that the gains recorded by the industry during recent years have been soundly based. That is, these gains have, for the most part, come about through a wide extension in the numbers

(*Continued on page 562*)

COURTESY UPJOHN CO.

USE OF COMPOUND G-4



BLACK STAR

By R. E. HORSEY and R. F. BACON*

EACH year vast sums of money and effort are spent in keeping livestock healthy. And one of the most annoying enemies of the peaceful and fruitful lives of cattle, and frequently horses and other livestock, is an infectious skin disease known as a dermatomycosis, caused by tinea tonsurans and similar species of fungi. This disease, commonly called bovine ringworm or barn itch, is most aggravating to livestock owners, due to its erratic occurrence, contagiousness, and slow response to different types of treatment.

The disease may be caused by the fungus or dermatophyte, *trichophyton album*, and its diagnosis is made from the appearance of round, well circumscribed, gray, dry, scabby lesions on the skin of the cattle, especially in the vicinity of the eyes, ears, and neck. However, it may occur anywhere on the body of the animal.

Since the disease is caused by a fungus, calves and yearlings kept in dark, damp, humid stables during the fall and winter are most susceptible to it, as fungi thrive under these conditions. Referring to the contrariness of the disease, however, it may not develop under the above conditions of season and stabling, but may harass the livestock owner by occurring in animals housed under ideal circumstances, even in pastured stock during the summer. And although the disease is most prevalent in young cattle, it may spread through a whole herd, or to the other livestock.

It is believed that the disease frequently travels throughout a herd because the fungus has spores which can live for as long as eighteen months in a barn or elsewhere. It is not uncommon to have the fungus spread from infected animals to healthy ones by the agent of a curry comb or brush, or by rubbing on a contaminated fence post. Everything with which the ringworm-infected cattle has been in contact must be disinfected.

To make matters worse, bovine ringworm frequently spreads from stock to the persons who try to treat the disease.

If the what, where, and when of bovine ringworm is unpredictable, so is its therapy; the response to various treatments is uncertain and often disappointing. Veterinarians may change from one therapeutic agent to another in order to get results. The list of chemical recommended for its treatment has grown very long. Phenolic substances, iodine, sulfur, mercurials, sodium thiosulfate, dyes, and organic acids have been used.

FOR BOVINE RINGWORM

And it is evident that if so many chemicals have to be resorted to, no one of them really has as yet succeeded in providing a cure for this erratic disease.

The well-known fungicidal chemical, Compound G-4, bis (5-chloro-2-hydroxyphenyl) methane, a mildewcide in the treatment of textiles, paper, leather and other materials, had attracted the attention of physicians on account of its great bacteriostatic and fungistatic action.

Dr. H. J. Udinsky and others have observed the use of an ointment containing 2 per cent of Compound G-4 in the treatment of over one hundred cases of tinea and tineal eczemas in both their private practice and in clinics. It was reported by Dr. Udinsky that "results in all cases were superior to those obtained by other forms of treatment."

The effectiveness of G-4 in the treatment of dermatomycoses in humans induced Dr. J. C. Sweatman to try the chemical on cattle. In an article entitled, "Clinical Manifestations and Treatment of Bovine Ringworm, "appearing in the January 1947 issue of *The Cornell Veterinarian*, Dr. Sweatman has made a report of his experience in treating 250 cases of bovine ringworm with a two per cent ointment of the following composition:

Compound G-4	**2**	**Parts**
***Isopropyl myristate and palmitate**	**10**	"
Cetyl alcohol	**11**	"
Lanolin U. S. P.	**5**	"
Petrolatum album	**72**	"

The two hundred and fifty cases were divided into five groups of fifty each and five different chemicals were used for treatments: tincture of iodine; alcoholic mercuric bichloride (2%); suspension of sulfur in linseed oil; sulfur-iodine in oil; and Compound G-4 ointment (2%). The first four chemicals were applied by means of a small varnish brush; preliminary scrubbing of the lesions with soft soap and warm water and the use of a stiff bristle brush for removal of the crusts was required when tincture of iodine or mercuric bichloride were used. In applying the Compound G-4 ointment, however, less effort was involved as it was spread on lightly with a wooden tongue depressor, using only slight friction. In all cases treatments were repeated every other day as long as necessary to arrest extension of the lesions and invasion of new areas.

Neither tincture of iodine nor alcoholic mercuric bichloride solutions appear to be practical because they can not be used on lesions around the eyes on account of the possible irritating effects and because the necessary removal of the crusts by scrubbing requires too much time.

The sulfur and sulfur-iodine preparations, while being effective, are somewhat disagreeable to prepare and use.

Comparing these five methods of treatment, Dr. Sweatman concluded: "I am convinced that Compound G-4 ointment, used in group 5, is a superior preparation having the following advantages: (1) it is efficient in arresting the spread and allowing the healing of ringworm lesions; (2) it is easy to apply and penetrates well; (3) it is nonirritating, nonstaining, nonodorous, and apparently nontoxic; (4) it can be easily removed from the skin; and (5) it is comparatively inexpensive."

The successful use by veterinarians of Compound G-4 in treating ringworm and other fungous infections has not been limited to cattle. Private communications have been received regarding its successful application in treating ringworm infections and chronic ear infections of dogs. Either the formula of Compound G-4 ointment listed above was employed, or a nonstaining cream of the following composition:

Compound G-4	**1-4.0**	**Parts**
***Isopropyl myristate and palmitate**	**15.0**	"
Stearic Acid	**18.0**	"
Triethanolamine	**2.0**	"
Propylene Glycol	**10.0**	"
Tergitol No. 7	**0.5**	"
Water	**50.5-53.5**	"

It will be interesting to watch to what other use this powerful fungicidal chemical, Compound G-4, is put by physicians, veterinarians, or industrialists.

REFERENCES

Dykstra, R. R., *Animal Sanitation and Disease Control*, Danville, Ill., The interstate, 1942.

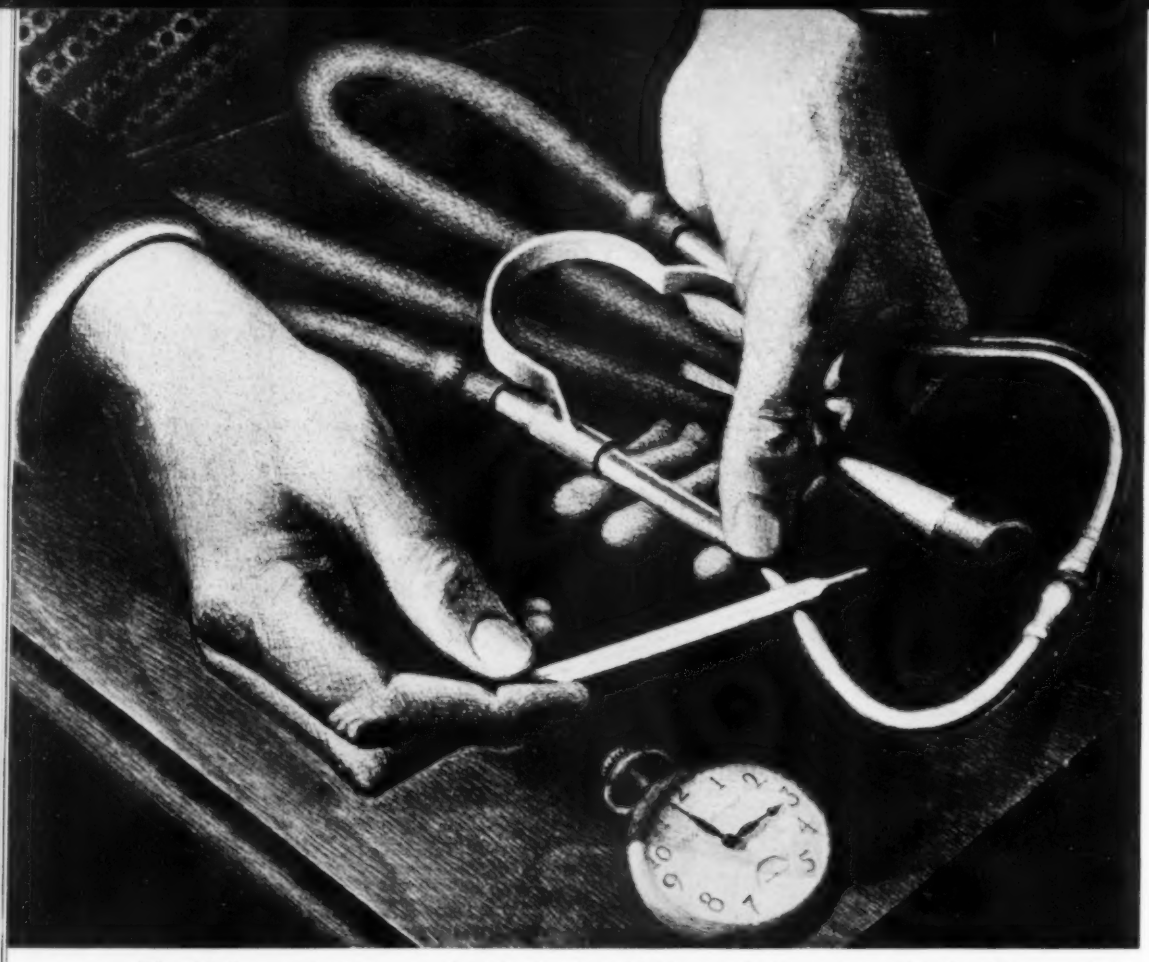
Sweatman, J. C., "Clinical Manifestations and Treatment of Bovine Ringworm," *The Cornell Veterinarian*, Jan., 1947.

Udall, D. H., *The Practice of Veterinary Medicine*, Ithaca, New York, 1943.

Udinsky, H. J., "The Use of a New Chemical in the Treatment of Fungus Infections of the Skin," July 1943.

*Compound G-4 is manufactured and sold by Givaudan-Delawanna, Inc.

*Sold by Givaudan-Delawanna, Inc. by the name of Deltyl Extra.



The detail man is the one real link that the ethical manufacturers have with the doctors, and the doctors are the only one upon whom these manufacturers rely to promote sales of their goods. The lithograph above, "Family Doctor" was the last work of the American artist, Grant Wood. It shows the hands of his physician and friend, A. W. Bennett, M.D., of Iowa City, Iowa. It is reproduced here through the courtesy of Abbott Laboratories by whom it was commissioned.

Selecting and Training Detail Men

FOLLOWING up our discussion of detail men appearing in our September issue, we wish to report on some more of the problems facing both manufacturers and doctors in the proper handling of these important factors in the field of marketing ethical drug products. After all, the detail man is the one real link that the ethical manufacturers have with the doctors, and the doctors are the only one upon whom these manufacturers rely to promote sales of their goods. It is true that the ethical manufacturers also detail the druggists, the hospitals, and other related professions, but this detailing is only to make certain that those allied in serving the doctor will be acquainted with the products of the manufacturers when the doctors order them.

As we have previously stated, different manufacturers have different methods of training their men. This depends partly on the breadth of the line which the men are to detail, as well as upon other factors such as the size of the detail staff and the extent to which the manufacturer in question plans to cover the medical profession. The larger manufacturers with a rather broad line of products, including many specialties

used in widely divergent fields of medicine, as well as products used by all types of physicians, give their men a much broader training than the manufacturers with a limited number of products. The manufacturer with relatively few specialties generally has a small detail staff, and it is therefore necessary for these men to detail, first, at least, the specialists in the field of medicine in which each new specialty is to be used. After these specialists have been thoroughly covered, these men can detail doctors of lesser importance in the particular fields of the specialties being introduced.

Various manufacturers have different educational requirements for the men whom they engage to do detail work. Some manufacturers require as an essential a degree in pharmacy. Others like men with chemical degrees. Others will take men with almost any college degree. And still others have different requirements. The educational requirements of the men engaged is generally tied in with the type of training which these men are to receive from the company which engages them. If the training is highly technical in character, a degree in pharmacy or chemistry is essential, although a pre-medical course and, perhaps, part of a medical course will prove equally acceptable. Requirements as to age vary to a marked extent among companies, and many companies give quite a wide spread in the age of the men whom they engage. Married men are generally preferred, and it is a requirement of many manufacturers that the man is carrying a certain minimum amount of life insurance aside from any GI insurance or company group insurance. In other words this amount of insurance he must have taken out himself and he must be paying the premiums on it himself. The manufacturers, therefore, want men of responsibility who will take their work seriously and, therefore, will be absolutely reliable.

Manufacturers feel that they have a heavy investment in detail during the first year at least. One manufacturer estimates that with training, salary, and other factors, the company invests at least $5,000 in a new man in the first year before he is ready to produce. At this rate, he says, one cannot afford many mistakes in the men whom he chooses. It is for this reason that the various requirements for these men are set up. Other things such as appearance, personality, and so forth, are evaluated by personal interview. Naturally all manufacturers are on the alert for good men, and when one comes along many manufacturers will generally grab him even though at the moment they are not certain where they will place him.

As in any other field of promotion or selling, a great deal depends upon the nature of the detail man himself. His personality, his ability to impress the large majority of those upon whom he calls, his ability to gain the confidence of the doctors, his ability to get the doctors to prescribe the products which he is offering,—these are factors that must be heavily weighed after the detail man is sent into the field. After all the detail man's first consideration, aside from that of his employer, is the doctor upon whom he calls. And even though he is trained in a certain manner, when he realizes that the story and tactics taught him by his employer do not sit well with any of his doctors, he must be able to change so as to hold this doctor's respect and confidence. Naturally a detail man, either from the point of view of his own welfare, or the welfare of his employer, cannot try to force something not believed by a doctor who has utmost confidence in the detail man and the house for which he works.

The doctor is a highly educated man who is daily watching at first hand the results of the use of a long line of drug perparations. He is quite certain that he knows what he is doing and what he is talking about from first hand experience. To gain the confidence and respect of a doctor—and to keep it—a detail man must display a great deal of diplomacy. He must always give the doctor the feeling that he is superior in the knowledge of medicine—which he is—and the detail man must not give opinions as his own, but he must merely refer to the findings of other doctors—men whom the doctor to whom he is talking will respect. A doctor has been taught through long training not to accept the observations of laymen, even though he may appear willing to listen to laymen. He only listens to laymen to learn from the laymen the work that other doctors are doing and to gain knowledge through the experience of these other doctors to whom he has not had the opportunity to talk.

The detail man is, in effect, nothing else but a salesman for the company employing him. And some manufacturers refer to them as salesmen on practically all occasions for the reason that they want continually to impress these men with the fact they are employed to see that the goods of the company sell. This is one thing that the manufacturers do not want the detail men to forget. It is all very well to give these men cards bearing the title "medical representative," or some equally impressive title, but these men must keep their eyes on the extent to which their activities move more goods for their companies.

It is an unwritten law among the very large majority of pharmaceutical manufacturers that one manufacturer must not engage a detail man who, at the time of application for a position, is working for another pharmaceutical manufacturer in a similar position. This makes it necessary for a detail man to resign his position before he can apply for another position. This sort of thing is quite necessary due to the nature of detail men and the work that they do. It stops them from moving around the industry too much and inspires them to try and perform a better job for the manufacturer who is employing them at the time. Furthermore, it is quite apt to protect each manufacturer's rather large investment in his detail men. Naturally, although this requirement is apt to act as a deterrent upon detail men changing their jobs, and causes them to overlook unfavorable conditions in the company in which they are working to some degree, it does not stop detail men from resigning their positions and getting new jobs when

(Continued on page 557)

"BEDLAM" by WILLIAM GROPPER

• *William Gropper, contemporary American artist, is represented in many of the leading museums throughout the country. He is a member of Associated American Artists through whose courtesy this photograph is reproduced.*

PEPTIC ULCER

By M. A. LESSER

ALMOST everybody knows somebody who has a peptic ulcer. Considered the most frequent digestive disease, peptic ulcer is a condition that cannot be ignored. Pain is its most prominent sympton and relief of pain demands prompt attention. Properly diagnosed and treated, an ulcer can often be cured or controlled. If neglected, it can result in a fatal hemorrhage or can so weaken its victim that he becomes an easy target for an infection.

Peptic ulcer, which includes both gastric and duodenal ulcers, is of importance because, among the chronic diseases, it ranks tenth as a cause of death and twelfth as a cause of days lost from work. It has been estimated that from 5 to 12 per cent of the people in the United States become afflicted with peptic ulcer during their lifetime.[1] Many workers[2] place the occurrence of peptic ulcer at about 10 per cent of the population. Taking the more conservative figure of 5 per cent, this means that at least 6,500,000 persons suffer from peptic ulcer in this country.[3]

Although it is predominently a disease of the young adult and middle aged person, peptic ulcer may occur at any age. The condition is more common in older people than is generally realized.[4] One study[5] revealed that 10.5 per cent of cases occurred in persons above the age of 60. Conversely, there are many reports[6,7] of cases of peptic ulcer in children and infants; some not more than a few weeks old. Quite often, unless there are complications like vomiting or hemorrhage, peptic ulcer in children goes unrecognized.

In the United States there is a preponderence of duodenal ulcer over gastric ulcer and a greater frequency of male sufferers than female patients. An analysis of the lesions of 15,567 patients studied in a five-year period showed a ratio of one gastric ulcer to 12.5 duodenal ulcers. On the basis of distribution according to sex, both gastric and duodenal ulcers predominated in men; the ratio of women to men being 1:4.3 for gastric ulcer and 1:3.6 for duodenal ulcer.[8]

The cause of peptic ulcer has not been determined. As remarked by Driscoll and Aaron,[9] the best definition is that for some unknown reason a portion of the lining mucosa of the stomach or duodenum loses its its power to resist the digestive action of the peptic acid gastric juice.

Of course many theories have been advanced to explain the etiology of peptic ulcer,[10,11,12] but none have proved completely satisfactory. The best known theories have been listed without discussion by Ivy,[1] as follows: (a) the acid-peptic; (b) the vascular: infraction, spasm, tugging on the vessels; (c) the gastritic: specific streptococcus, nonspecific inflammation from acid or rough and irritating foods; (d) the neurogenic: vascular spasm, hypermotility and secretion; (e) the allergenic; (f) the nutritional; (g) the unknown constitutional, and (h) the unknown metabolic or endocrine. However, several factors which predispose to chronicity have been established. They are: (a) acid; (b) rough food; (c) gastric retention; (d) poor nutrition, and (e) mucosal gradient of susceptibility to acid.

Undoubtedly, the acid-peptic theory is the one which has received the widest acceptance. On the basis of experimental and clinical evidence, the important role played by the chemical and digestive properties of the gastric juice is generally conceded.[8] There is general agreement that the stomach of a patient with peptic ulcer has lost its ability to resist the digestive action of the acid pepsin secretion. It is well established that the presence of free hydrochloric acid is necessary for ulcer production.[13]

As explained by Palmer,[14] acid gastric juice is responsible for the formation of the ulcer itself and for the inflammation present; this inflammation being of a chemical nature. Such inflammation lowers the pain threshold of the nerves in the stomach so that they become sensitive. They then may be stimulated to the point of pain by the irritation of the acid. Under such circumstances, pain may also be invoked by motility, by spasm or by pressure. With continued neutralization of the acid the imflammation subsides, the pain threshold rises, the lesion is no longer painful and the ulcer heals.

During recent years there has been considerable emphasis on the emotional factors and psychoso natic elements in the production of peptic ulcer.[15] Significant in this connection is the definite increase in the number of acute ulcer cases in England during the air-raid years; this being attributed to emotional stress and strain.[14] Disturbances of gastro-intestinal motility, tonus and secretion, all conducive to ulcer develop-

ment, are attributable to neuropsychic causes. In the considered judgment of Eusterman,[8] this present-day psychosomatic concept of the disease in the general run of ulcer cases, especially duodenal ulcers, has more to support it than any other theory. Emery[2] similarly believes that nervous or emotional tension is the most frequent activating influence.

This view is strengthened by the successful results obtained in many cases by sectioning of the vogus nerve.[16] Also important is the work done by Wolf and Wolff,[17] who observes the mucosa directly in a patient with a gastrostomy. They noted that varying states of emotional tension, such as resentment, hostility, and aggressiveness caused changes in the gastric mucosa.

While it has long been recognized that peptic ulcer is very often associated with energetic people and worriers, there are many workers who feel that undue emphasis is placed on the emotional factors. For example, Gainsborough and Slater[18] have pointed out that while the play of psychogenic factors alone seems unlikely to effect the initial occurrence of peptic ulcer, nevertheless the role of such factors in the continuance of the condition and in relapses cannot be ignored.

Noting that it is very difficult to evaluate the role of emotional factors in peptic ulcer, Palmer[14] emphasizes that ulcer occurs in all races, all countries and in people of all occupations. It is not just a disease of doctors, bankers and lawyers, but appears in all types of laborers, both white and colored. It occurs at all ages, from intrauterine life to senility.

Pain is the most typical symptom of peptic ulcer. It may be dull, aching, gnawing or burning. In many cases there is a certain regularity or rhythm in the time when the pain occurs; this depending on the location of the ulcer. In the case of gastric ulcer, the epigastric pain generally comes on shortly after meals, while in duodenal ulcer patients the pain appears some hours after food is taken.[19] This is explained by the fact that while food is in the stomach or duodenum, it protects the lesion against the gastric juices. When, however, the food continues on its way it leaves the raw area exposed to the acid peptic action. The duodenum, being further along the digestive tract and being narrower than the stomach, takes longer to permit the passage of food; hence pain is somewhat delayed.

These and other symptoms are so typical in the average case, that attention is promptly drawn to the possibility of peptic ulcer. Positive diagnosis of the condition is aided not only by laboratory determinations of free hydrochloric acid in the gastric juice, but also by careful X-ray examination to learn the size and location of the ulcer crater. The growing use of the gastroscope has increased diagnostic accuracy. This instrument permits direct inspection of the gastric mucosa and often leads to the detection of small lesions not visible by X-rays. The gastroscope is also a valuable aid for appraising the effect of treatments on the healing of gastric ulcers.[8]

Medical treatment of peptic ulcer is aimed primarily at providing conditions most favorable to healing. Healing is considered complete only when the lesion is closed and covered with normal mucosa. The principles of the medical treatment of uncomplicated peptic ulcer is satisfactory and well-established.[1] Indeed, Gill[19] has said that there are few cases of peptic ulcer which, when properly handled and treated, will not respond very well to therapy, with loss of pain in a short number of days.

However, medical men recognize that it is much easier to bring about healing of an ulcer than to prevent its recurrence. As a matter of fact the ulcers often heal spontaneously.[20] Because of this tendency to recur, many physicians regard peptic ulcer as a chronic disease in a class with diabetes, rheumatic heart disease or arthritis.[9] According to Winkelstein,[21] only a small per cent of ulcers are "cured" medically. A fair proportion go through life with mild symptoms, but the remainder (perhaps 25 per cent) are refractory and require intensive therapy. As noted by Hinton,[22] gastric ulcers respond more readily to medical management than do duodenal ulcers.

As part of the medical treatment of peptic ulcers, it is essential to eliminate, as far as possible, certain harmful influences. These include emotional tension, physical fatigue, focal infection, inadequate sleep, alcohol, tobacco, beverages and condiments with a marked secretogogue effect, coarse foods and hurried mastication.[8]

Rest, both physical and mental, is a major factor in peptic ulcer therapy, and if possible it should be secured in the form of a vacation or a change. Sometimes sedatives are indicated as aids to secure emotional relaxation and relief from anxiety.[23] In Parson's[24] opinion the tense, nervous, apprehensive patient should receive some form of bromide or barbiturate.

Antispasmodic drugs, like belladonna and atropine, are often of marked value in ulcer treatment because they relax smooth muscles and curtail gastric secretion.[21, 25, 26] In his recent report, Douthwaite[23] stressed the usefulness of belladonna and cited its value for reducing gastric and duodenal spasm and for speeding the emptying rate of the stomach.

Sometimes combinations of an antispasmodic and a sedative give satisfactory effects. Belladonna and phenobarbital are often used conjunctively. These may be combined either in a capsule containing 15 mg. (¼ grain) of extract of belladonna and 15 mg. (¼ grain) of phenobarbital, or in a mixture consisting of 0.5 cc. of tincture of belladonna in 5 cc. of elixir of phenobarbital.[26] Similar combinations are available commercially.[24]

Diet is a very important factor in the treatment of peptic ulcer. This entails frequent small feedings of bland foods, such a diet being free of stimulating, irritating and rough foods. Milk is usually the basis of such a diet because it is effective in small bulk, helps to neutralize gastric acidity, has a high protein value and contains some essential vitamins.[19] Vitamins supplements are frequently prescribed. Because of the limita-

(*Continued on page 550*)

PREDICTING CONSUMER ACCEPTANCE

A NEW AND foolproof method for predicting whether a new cosmetic package will sell made an impressive showing as results of its first major test were unveiled in Chicago late last month. The method also gives basic reasons why some old packages don't move off the shelves and even can predict whether advertising copy will stimulate purchases.

Professor W. Lloyd Warner and Dr. William E. Henry cited their score of 87½ per cent accuracy as proof that the new method now being used by Social Research, Inc., holds tremendous possibilities in the fields of cosmetic product design and advertising copy.

In the original exploratory researches conducted for Gartner and Bender, Inc., nationally known Chicago greeting card publishers, Warner and Henry specified in advance which of a long list of cards would be acceptable, and which would be unacceptable to female purchasers. The latest report extends the original research, and applies the principles to the many fields in which illustrations, designs and symbols are used to influence female consumers. It also reports results of the greeting card study.

Controlled tests by a selected jury of 871 female purchasers showed that the cards designated as acceptable by Warner and Henry were chosen in a ratio of seven to one over those listed as unacceptable, a proportion greatly exceeding that of pure chance.

Unlike many analytic methods now being used, the new system does not employ a check list of appeals. It is, rather, a psychological study of pictures, colors and forms favored by any selected group of persons.

Given the basic facts concerning the kind of consumers a manufacturer wants to reach, the researchers declare that they can predict whether cosmetic packages, advertisements, window displays or consumer products will appeal to this given group of persons.

W. Lloyd Warner, a professor of anthropology and sociology, is the author of many sociological and anthropological studies, one of the most recent being "The Status System of a Modern Community," with P. S. Lunt, published in the Yankee City Series of Yale University Press. A monograph by Dr. Henry on the subject of "The Thematic Apperception Technique in the Study of Culture-Personality Relations" recently appeared in "Genetic Psychology Monographs."

The report shows that the researchers determined all the salient facts about the product which they were studying. For instance, in this case, they determined that greeting cards are used "as a means of social communication and enjoy greatest usage among the members of the Common Man group in our society." Also it was determined that "the greeting card, as now used in the Common Man group, expresses in its text and design the commonly held views, ideas and moral values of the Common Man group." A third tenet is that: "Greeting cards, as used in our society, comprise a system of symbols that has public meanings commonly accepted by all, and additional meanings that are private and that depend upon the personality of the individual perceiving the card."

From their studies, both men have adapted a technique which they now feel satisfactorily applies social and psychological research principles to the problems of package, design and copy appeal.

It had been found in previous psychological studies that underlying feelings are often symbolized in predictable ways. As the study points out, "it was predicted that women in the main would select cards in warm colors, cards with people in friendly, neighborly situations, forms which were enclosing and shapes with smooth, rounded edges. These all symbolize warmth and friendliness. The overwhelming choice of the female judges for specific symbols covering these feelings and constructed to meet the specific stereotyped ideas involved was gratifying. For the small minority of women who longed for increased status and social prestige, it was predicted that they would choose the cooler colors, the less floral and more simple designs, shapes that were more elongated and irregular than round and enclosing, pictured situations that were impersonal. Here too the judges' choices corroborated the predictions.

"The pattern of stereotyped attitudes attributed to Mother and predicted as most acceptable were symbolized by warm colors largely in blues and pinks and

(Continued on page 564)

Dab-Ette — the smart modern way to apply perfume — uses a PLASKON MOLDED COLOR CASE!

The Dab-Ette is molded for the Container Specialty Company, Cleveland, Ohio, by Atlantic Plastic & Metal Parts Co., Cleveland

This new cosmetic item is getting quick, large-scale acceptance because of its many practical features—*and its beautiful, eye-arresting appearance.*

Plaskon Molded Color makes possible these distinctive Dab-Ette advantages:

1. **Three colors: red, blue and black, to permit the identification of various perfumes used by the wearer.**
2. **The Plaskon container is not affected by perfume oils, nor is the perfume in any way affected by the Plaskon material.**
3. **No metal to tarnish, scratch, or mar contents of purse.**
4. **Light weight; does not break, leak or spill.**

This is another example of how versatile Plaskon plastics are serving the design and utilitarian needs of America's drug and cosmetic manufacturers. Both Plaskon urea-formaldehyde and melamine-formaldehyde molding compounds are completely impervious to the effects of alcohol, acetone or other common organic solvents. They are not affected by oils, fats or greases.

Write for free illustrated book showing many uses of Plaskon* urea-formaldehyde and melamine-formaldehyde molding compounds in manufacturing and merchandising.

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PACKAGING and SELLING

COSMETIC EXCISE TAX

APPARENTLY the cosmetic industry can expect some mental acrobatics from the Treasury Department in an effort to maintain the 20 per cent tax on the products of this industry.

It was our understanding when these heavy war-time taxes were imposed that cosmetics were included with jewelry, furs and luggage as luxury products which could well afford to take it on the chin with a heavy consumer tax in support of the war effort. Last year members of the industry in appearing before Congressional committees to appeal for the elimination of this war-time tax, stressed the fact that cosmetics were largely a necessity and should not, therefore, become so high a burden to the American public.

Now the Treasury in a report to Congress on the present 20 per cent tax on the retail sales for furs, luggage and ladies' handbags, articles of jewelry, including watches, and toilet preparations makes the rather astounding assertion that furs, luggage and jewelry are luxuries on which the 20 per cent tax may have a definitely unfavorable effect on sales, but that toilet preparations are more nearly a necessity and that the high taxes, therefore, are not apt to cut back the sales of these articles. In other words, it would seem that the Treasury now takes the stand that a high tax should not be imposed upon luxuries, because with this greater increased price many people will be unable to purchase them, but that a necessity can continue to carry this heavy tax, because somehow, even though they go without lunch, American women will desperately strive to continue the use of cosmetics.

Perhaps in the long run it is just as well to see the Treasury commit itself to a belief that cosmetics are a necessity. We have pointed out here many times that a summary of dozens of authentic, scientific surveys prove conclusively that over 80 per cent of the women in this country, including housewives, factory and office workers, and women on farms use most cosmetics, including creams, face powders, lipsticks, etc. Certainly any cosmetic which is demanded by 80 per cent of American women and in constant use by them must be termed a necessity, and it would seem that no further argument on that score was needed.

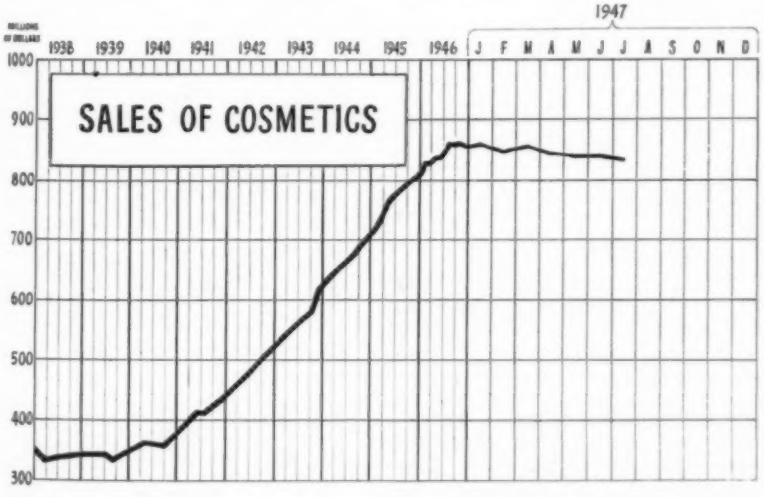
Early next year it will be interesting to see whether Congress will adopt this new and rather startling theory of taxation, that luxuries should be favored with a tax reduction, but that a necessity can still be used to impose upon American women a discriminatory and unfair additional price.

These studies by the Treasury are undoubtedly based upon the study of receipts from the excise taxes from each of these industries during the Spring of 1947, because this was the first crucial postwar test of sales for each of these industries. Although we do not have available reports of the excise tax payments for furs, jewelry or luggage, we do assume that sales dropped substantially in these industries, and that as a result tax receipts from these industries substantially decreased indicating to the Treasury that the additional added price, caused by the excise tax, had put these products beyond the reach of many consumers. We certainly agree that this was undoubtedly a sound conclusion, although it should be added that in a recent analysis of the costume jewelry industry the Wall Street Journal reports a recent turn in this industry and states that it is now working at peak capacity with very active business. Maybe the Treasury will now reverse its stand and decide also that costume jewelry is a necessity which must continue to bear this emergency war-time tax.

So far as cosmetics go, the manufacturing industry, whose sales almost universally fell abruptly and substantially with the turn of the year, have for several months been observing with wonder the money returned to the Treasury each month by retailers on the sale of cosmetics.

According to excise tax figures, cosmetic sales decreased an average of only 2 per cent for each month during the Spring, then there was quite an abrupt drop of 14 per cent for one month which brought the average decline in sales during a 7 month period to a fraction over 5 per cent.

The industry has explained this wide variation between their own sales to retailers and the sales by retailers to the public in various ways. They knew that the retailer was heavily overstocked with war-time merchandise, much of which would never again appear on their shelves, and has been dumping this widely over the counter in many promotions which offered the consumer excellent bargains. They believe also that there has been some trading done. It must certainly seem that the Treasury, from a superficial examination of tax figures and certainly not from a detailed examination of business conditions within the



Retail sales of cosmetics for the twelve months ended with July 1947 amounted to $833,550,000. This compares with a total of $842,967,000 for the twelve months ended with June 1947 and with $841,091,000 for the twelve months ended with July 1946.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing the increase for the month of July 1947 as compared with the same period in 1946.

	Department Store	*Drug Store*		*Department Store*	*Drug Store*
Atlanta	+1	+7	Memphis	X	−5
Baltimore	−10	−10	Milwaukee	+6	0
Birmingham	−4	−4	Newark	+4	+10
Boston	+7	+1	New Orleans	+3	X
Chicago	+16	+3	New York	+9	+6
Cincinnati	+7	0	Philadelphia	+3	+1
Cleveland	+8	−4	Pittsburgh	+3	0
Dallas	−12	−8	Providence	+2	−2
Denver	X	+3	Saint Louis	+10	0
Detroit	+7	+11	San Francisco	−1	+6
Indianapolis	+6	−7	Seattle	−1	−5

industry, so far as we have been able to ascertain, has jumped to a thoroughly unwarranted conclusion regarding the effect of excise taxes on industry sales. Since each branch of the industry is an integral and central part of the cosmetic picture—that is the products sold in the variety store, the mass distributed, medium priced products of the drug store, and the class or prestige products of the trade, primarily found in the department store—each of these divisions of products appeal to and satisfy a distinct economic group in the United States. Who can say that one part is more entitled to live and to prosper than the other part. Yet we believe that if the Treasury had made a fair investigation of conditions within the industry, they would have found that, even though cosmetics are a necessity to the American women, this heavy additional imposed price increase is seriously affecting the purchase of many articles within the cosmetic industry.

We quote below a detailed report which appeared in the Wall Street Journal of October 6 on this Treasury report as it affects toilet preparations. This complete report would make interesting if not amusing reading to many in the industry. The pontifical observations of the Treasury in regard to the economic life of these select industries will at times require a rather strong digestive system to take in this solemn reasoning.

"Toilet Preparations: The demand for toilet preparations arised primarily from the desire to increase personal attractiveness and the effect of the excise tax on sales 'was much less apparent than in the case of other retail excises.' There are no indications that the industry has expanded output beyond the level of demand. Under high employment and income conditions the 20 per cent tax on toilet articles "is not expected to have a serious effect on the profits of the industry. The proportion of family income spent on toilet preparations is about the same for all income groups under $5,000 annually.

"Retail sales of toilet goods are highly seasonal, about 30 per cent of the sales coming in November and December. Any tax reduction should be made considerably before or following this peak season.

"From 1932 to 1941, a tax on toilet preparations was levied at the manufacturers' level; since then, at the retail level. The Treasury notes that administrative problems under the retail tax are less serious than the tax at the manufacturers' level.

"About 150,000 returns under this tax were filed during the 1946-47 fiscal year, bringing in about $95.5 million."

Chain Druggists See Profit Rates Shrink

Stating that chain druggists throughout the country are facing a shrinking net profit percentage, Harry S. Sylk, president of Sun Ray Drug Company, Philadelphia, believes that future business will go to the manufacturers who recognize in their pricing the services rendered them by chains.

Mr. Sylk asserts that the warehousing services performed by chains affords manufacturers a lower cost of distribution than through wholesale distributors, yet the prices of merchandise to the drug chains have been considerably higher than prices to wholesalers.

Aside from saving the manufacturer expense of many extra sales calls, billing and drop deliveries, the chain includes in its service not only warehousing but also effective cooperative advertising, close watch over stocks, payment of premiums to move slow goods and full participation in the manufacturers' sales drives. The warehouse service alone, Mr. Sylk claims, costs the chain 5 to 7 per cent of retail sales, which taken from the gross profit of some 30 per cent, leaves too little to the chain.

Local Cosmetic Shows

The toilet goods shows of 1947 are now history, but a great debate is being waged by salesmen and sales executives as to their future place in the cosmetic industry.

These shows were started during the war largely on the basis that gasoline rationing and uncertain traveling facilities made it difficult for the salesman to get to the buyer, but that it would be relatively easy for the buyer to come to the salesman. Shows sprang up all over the United States and were a sort of instantaneous combustion whenever a group of salesmen got together.

These shows have been entirely controlled by local salesmen who have formed an organization in their territory to conduct the show on rules which they themselves have laid down according to local feelings and requirements. They have been conspicuously well run, and during the war brought large attendance and real enthusiasm from retail buyers and salesmen, as well as most sales management.

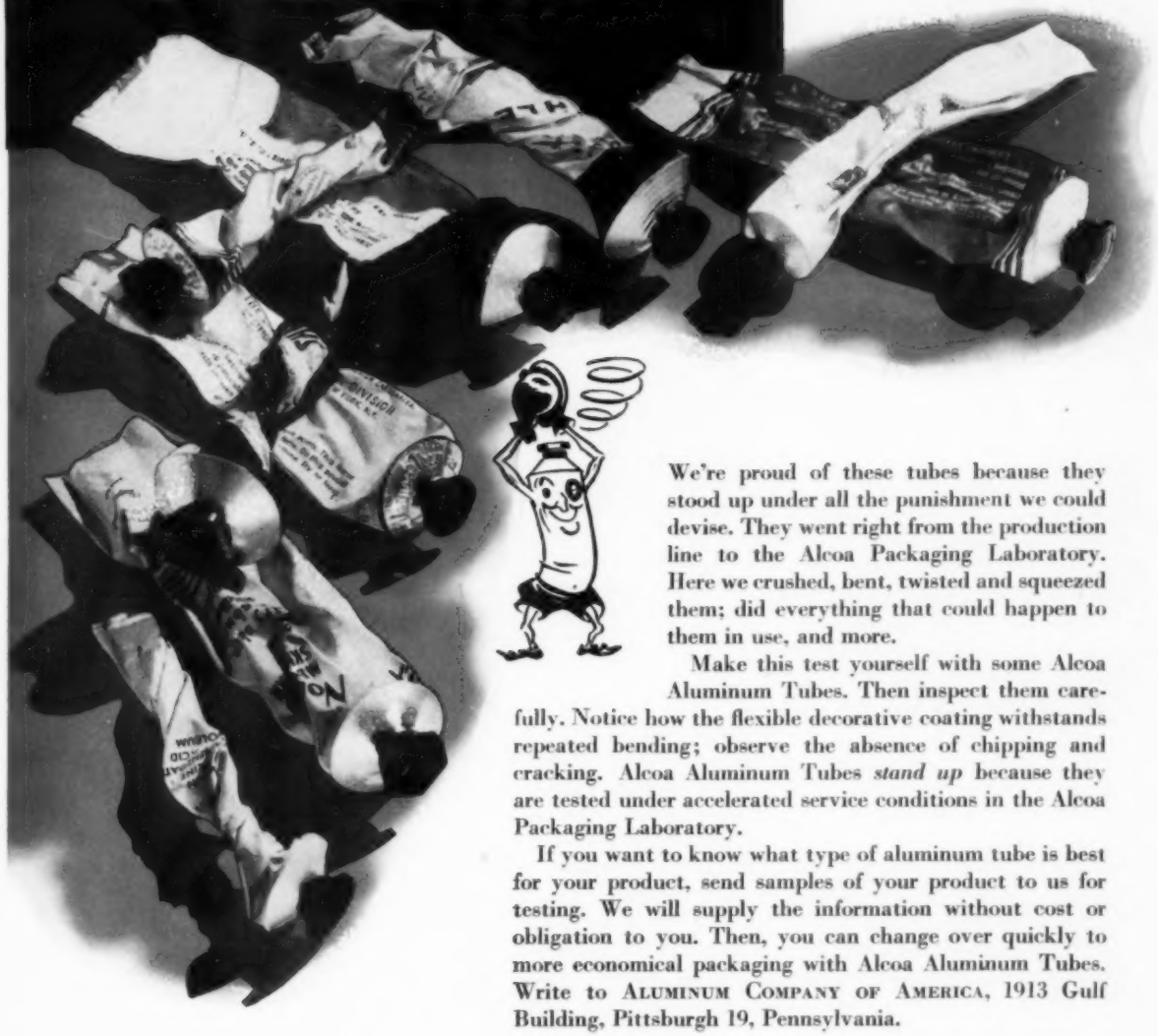
To a large extent the local salesmen's organizations have excluded as exhibitors companies which had no representation in their territory, or in some cases, companies which had not employed a local territory salesmen for the space of one year. This was an effort on the part of salesmen of leading houses, whose names supplied a primary drawing-card to attract numerous buyers, to prevent companies which made no effort to sell in that territory, from contacting the trade through this show in an inexpensive way with no future investment in territory development.

On the other hand a few of the top manufacturers in the industry who maintain expensive show-rooms, large sales organizations and whose products are a must in most retail stores have largely ignored these shows.

During the war and even this year there was a strong tendency to over-do the show idea and to play it to its limit. Instead of being satisfied with a major show in a territorial center, smaller groups of salesmen, even in some cases only eight or ten company representatives have gotten together in smaller cities to run a little private show. These shows again served a certain purpose during the war years, but the experience of 1947 seems to indicate very clearly that the industry cannot support an unlimited number of shows.

The attendance at the smaller shows this year, as well as the buying, did not compare favorably with the major

WE'RE PROUD OF THESE TUBES



We're proud of these tubes because they stood up under all the punishment we could devise. They went right from the production line to the Alcoa Packaging Laboratory. Here we crushed, bent, twisted and squeezed them; did everything that could happen to them in use, and more.

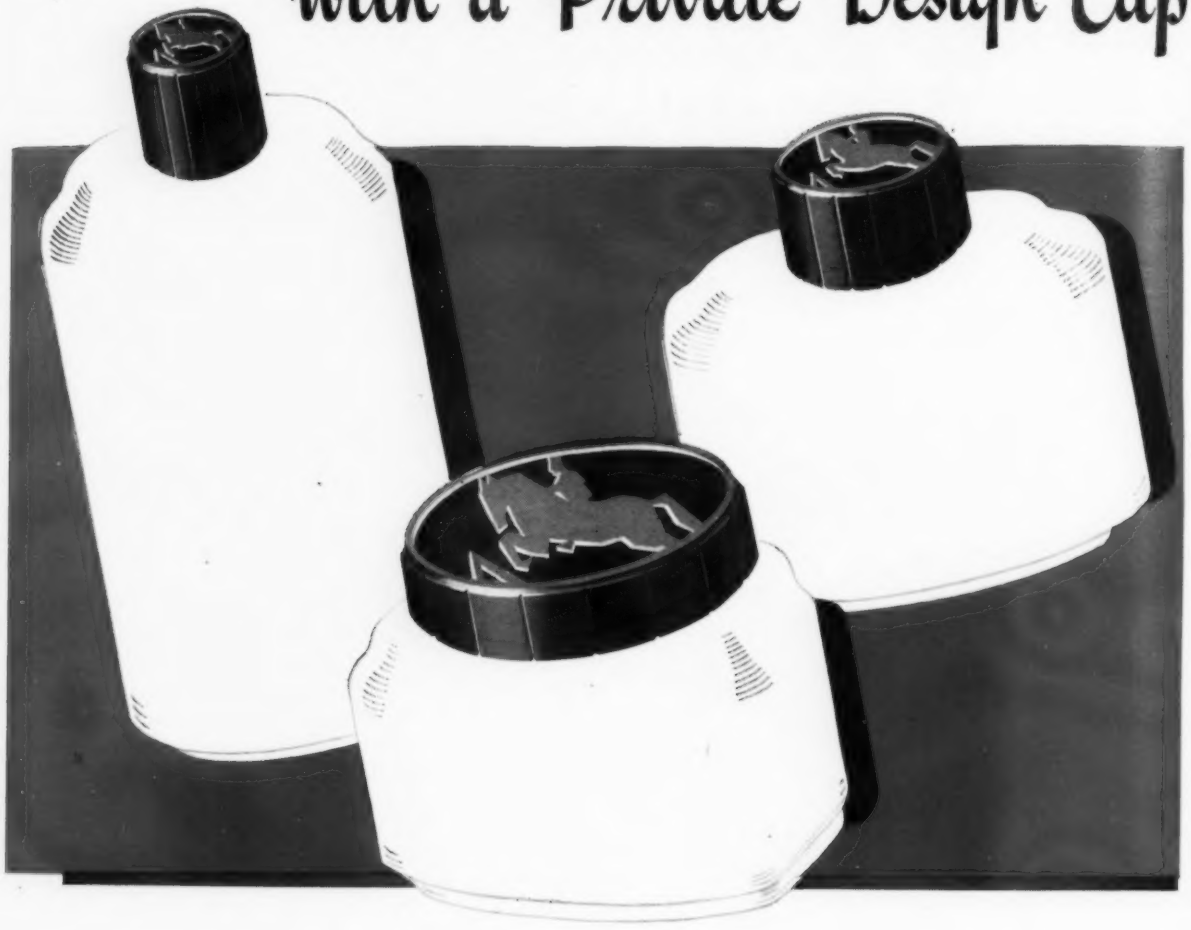
Make this test yourself with some Alcoa Aluminum Tubes. Then inspect them carefully. Notice how the flexible decorative coating withstands repeated bending; observe the absence of chipping and cracking. Alcoa Aluminum Tubes *stand up* because they are tested under accelerated service conditions in the Alcoa Packaging Laboratory.

If you want to know what type of aluminum tube is best for your product, send samples of your product to us for testing. We will supply the information without cost or obligation to you. Then, you can change over quickly to more economical packaging with Alcoa Aluminum Tubes. Write to ALUMINUM COMPANY OF AMERICA, 1913 Gulf Building, Pittsburgh 19, Pennsylvania.

MORE people want MORE aluminum for MORE uses than ever

ALCOA ALUMINUM TUBES

Individualize your package with a Private Design Cap



The individuality gained by using an Armstrong's Artmold Cap emphasizes the quality of your product and makes a lasting impression on the customer's memory. And a distinctive package is a step toward greater sales. The three Armstrong's Artmold Cap designs shown above may suggest ways to enhance the appearance of your package and give it an air of quality that can be achieved in no other way. Once selected, your Artmold cap is exclusively yours. For design and color suggestions, cost estimates, including mold costs, send us a sample or drawing of your package. Armstrong Cork Company, Glass and Closure Division, 1910 Prince Street, Lancaster, Penna.

ARMSTRONG'S *Artmold* CAPS
PLASTIC

shows. Many salesmen were inclined to agree that the smaller city show has served its purpose, including a number of salesmen whose territory did not include the territory of a major city.

Manufacturers in many cases are becoming seriously concerned with the expansion of the toilet goods show idea, largely based on the very logical reasoning that a salesman cannot perform his proper function simply by sitting in a hotel room and selling buyers. Such a display and sales contact is logical enough for a week or ten days. However, the primary job of the salesman is to go to the retail store, contact the buyers and sales executives in their own store and in their own city and to make some effort to get acquainted with the department salesgirls; in other words to establish personal contact and do a merchandising job and not just to sell the buyer in a hotel room in another city.

There was also some discussion about the date of the various shows. This year they have been bunched together so closely that sales executives from the home office were not able to attend some of the important shows. A number of sales executives feel there is a great deal of value in a few days contact in these major territories as an over-all picture of business conditions in the territory.

The Chicago show, held the second week of September at the Palmer House, was one of the more successful shows this year. There was a great deal more cheerfulness than most people expected. The attendance was good and the buying, although the individual orders were small, was excellent. In a large percentage of the cases, buyers stated that current orders were largely for inventory replacement and not so much for Christmas business. They stated that Christmas business would be placed at intervals with moderate orders and that buying would continue until late in the season. This policy, which seems general in the retail trade and is formulated far above the buyer's head and in many cases strongly influenced by the banking interests, may cut substantially into the cosmetic volume for the Fall season. If with the return of cool weather and the development of a real Christmas spirit, and with buying anywhere comparable to our national income, manufacturers will certainly be unable to deliver sufficient Christmas merchandise to the stores at a late date.

The goods may not be manufactured or packaged because the manufacturer has his own inventory problems. The manufacturer has his own inventory problems. The railroads will very likely be unable to handle or deliver in time late November and December orders, and the retailer himself is notoriously slow in transferring goods from the receiving department to the retail counter.

More Cooperative Advertising

Cosmetic manufacturers are really beginning to feel the pressure for cooperative advertising for this fall. Many of the chains and a number of the larger department stores now believe they have an opportunity to equal the big sales of last year in the cosmetic department, if they can only blow in enough fall advertising money.

This pressure is particularly severe from the chains, and especially those few chains where during the war cosmetics became the center of executive interest and consequently of substantially increased space in the store and increased sales. Whelan Drug Company, New York, unquestionably was the most alert and far-visioned cosmetic merchandiser in the chain field. Their store modernization program featured the cosmetic department, their personnel training program, and their coordinated execution of manufacturers' promotions gave them a front-place position in cosmetic merchandising. The result was a several hundred per cent increase in cosmetic sales during the war period.

Last year Whelan was reported to have spent over three hundred thousand dollars in cooperative cosmetic advertising, with Walgreen spending substantially more. The new aggressive cosmetic-conscious policy of leading chains have made them an increasingly important factor in cosmetic distribution. It is probable that chain drug stores will now do nearly one-third of the retail cosmetic business, excluding variety store merchandise. The fact is that a single unit can often provide really enormous volume to a manufacturer. This is a potent position in bargaining for cooperative advertising. It is possible that this retail pressure for cooperative advertising, based upon the determination of many leading retailers to make the Fall season compensate for the slack period of the first six months, will force many manufacturers to devote an increasingly large slice of their advertising appropriation to local cooperative, newspaper advertising.

Natural Blush, pink-toned face powder shade is the newest addition to Guerlain's Shalimar-scented face powders. A new French formula is now being used for all Guerlain powders with the result of finer texture and greater stay-on quality.

From Lucien Lelong comes a new perfume in the romantic tempo called Tempest, a warm, delightful fragrance which comes in a gleaming crystal, prismatic bottle.

Closely following the debut of Dark Brilliance lipstick, Lentheric introduces five new Dark Brilliance perfume accessories.

P-45---a new stock bottle in line with Swindell's tradition of quality

It's ready now! Swindell's new stock bottle, designed along classic lines that hold special interest for the perfume and cosmetic trade!

Available for immediate delivery in ⅛ ounce, ¼ ounce, ½ ounce, 1, 2, 3, 4, 6, 8, and 16 ounce sizes.

SWINDELL BROS., BALTIMORE, MD.
200 FIFTH AVENUE, NEW YORK • ROBERTO ORTIZ—HAVANA, CUBA

When you think of bottles think of

Swindell

Breath Insurance

Breath-o-lator, developed by Bing Crosby's Research Foundation in Hollywood to combat unpleasant breath, employs the vapor of a non-medicated, non-toxic compound Neutragen to neutralize unpleasant breath at the source. When breath needs freshening, the cap of the Breath-o-lator is lifted, the mouthpiece inserted in the mouth, and a deep inhale is taken. The vapor is thus drawn through the mouth into the bronchial tract as well as into the oral cavity.

Finished in chrome, the breath control device contains a small wafer impregnated with Neutragen, which is easily replaceable. Packed in a neat germ-proof package with two extra wafers, it retails for $1.00. The wafers are effective from two weeks to thirty days.

Sigma Products Corporation, New York, has been granted the exclusive license to manufacture and distribute Breath-o-lator. Sigma's president is Jess W. Sweetser, the famous golfer. Dudley P. Felt, who formerly was vice president of Yardley, Inc. is executive vice president. Howard M. Fillebrown has been named merchandising and advertising director.

Packaging Show

The American Management Association's 17th Packaging Exposition has been scheduled for April 26-30, 1948. It will be held in the Public Auditorium, Cleveland.

Peace Offering

For the past year a series of ads have been appearing in *Fortune* and *Esquire* magazines boosting the Saint and Sinner perfume of Adrian. The theory being that men buy more perfume than women. Hence the advertisements are directed to the male audience of the magazines.

Each advertisement offers advice on how to make time with the wife, mother-in-law, secretary, daughter, girl friend or somebody else's wife, as the case may be. The ads ask a list of questions concerning the thoughtful little gestures that women like from men, such as holding a chair for them as they sit at a table in a restaurant, remembering their birthday with flowers, or on other occasions giving them a gift that will make them feel attractive and feminine. The gift, of course, as the copy brings out should be Saint and Sinner.

The Cosmetic Trend

Making possible a more detailed recheck of the per capita consumption figures of cosmetics the recently published population estimates of the Bureau of the Census disclose a series of important trends in the toilet goods markets of considerable interests to manufacturers. At a population strength of 143,311,000 by April 1947 per capita toilet goods consumption can be calculated at $5.90 on the basis of the annual consumption rate of cosmetics of $845,-771,000 established by this magazine. This is 17 cents lower than the average figure for 1946 but 15 cents higher than the 1945 figure. Allowing for price and time differences in the calculation of these figures it is probable that cosmetic consumption has not changed materially during the last twelve months and that the remaining part of the year can make up fully for present discrepancies. There is the consideration, though, that if consumers managed to buy cosmetics at the per capita rate of $6.07 during last year there are no valid reasons why they should not buy as much this year or at least can be made to reach the 1946 level if the industry cares to make the effort.

That there is plenty of room for improvement is shown by the other fact brought out by the new population figures of the Census Bureau. The effect of the growing birth rate makes itself noticed and calls for attention. Where the cosmetic industry was dealing with a 10,520,000 market of juniors below 5 years in 1940 it has now 14,307,000 potential customers in this age group, with families with a substantially higher income than during the computation of the last census.

Cosmetic merchandisers will also please note that the urban population has grown 12.7 per cent since 1940. The rural non-farming population rose at the rate of 14.3 per cent, while the rural farm population shows a drop of 9.6 per cent.

International Advertising Awards

A panel of four leading art directors gave advertising awards for advertisements in the international editions of the *Reader's Digest* to Revlon Products Corporation and Lambert Pharmacal Corporation.

The prize-winning Revlon advertisement was selected by the panel from a group of advertisements published in the Spanish language edition of *Reader's Digest* in 1946, as the third of five advertisements which made the most effective use of space.

Lambert Pharmacal was presented with an art certificate for honorable mention among the five advertisements chosen.

Gift Sets

Perhaps the biggest slump in the cosmetic industry is in the production of Christmas sets. Both retailers and manufacturers emerged from the last Christmas season with a very sour taste in their mouths for the Christmas set.

Almost every manufacturer who has a Christmas set is assembling it from stock merchandise which entails minimum headaches on returned goods, and those who are bringing out new sets are

Maurice Rentner presents his jewel lipstick in six fashion-right shades. This handsome case is easily refillable.

Ciro has introduced its sachet in a completely different and attractive crackled blue bud vase—a handsome gift and a gracious addition to any dressing table.

Luxury in the bathroom is the purpose of the Marvanity which is being introduced by the Marvanity Co. Made of chromium steel and white plastic, it serves as a vanity while bathing.

either setting a rigid retail quota, as is the case with Revlon, or they are warning retailers not to over-buy the sets and stating that they will be very tough with returned goods.

The buyers' reaction to sets at the cosmetics shows was a crossed finger attitude. All were very cautious and some took the attitude of one prominent buyer when he said, "I do not care if I never see another Christmas set in my life." This attitude strikes us as a very natural reaction of anyone who has had his fingers burnt before.

We think, however, that the Christmas set is an essential part of the cosmetic business, necessary for its volume, both for manufacturer and retailer, and definitely wanted by the consumer. The perfume and cosmetic set makes a thoroughly desirable present which has always run high in public esteem. Because of the variety and the beauty of these sets and their universal appeal to every type and age woman and to men, they give the cosmetic industry and the cosmetic retailer a favorable opportunity to compete with many other industries in the gift market. It is very likely that both manufacturers and retailers have seriously underestimated the public's desire for gift sets this year, and we prophesy that next year the gift set will return with full fledged vigor as an important and essential part of the industry.

Repackaged "Sir" Ready For Christmas

Completely redressed in striking new package designs, Ferd. Mulhens' "Sir" line of toiletries for men this year now offers a popular selection of gifts for the Christmas trade.

Using maroon and white as central colors, the new "Sir" packaging theme is designed not only to reflect the masculine character of the products themselves but also to catch the eye readily in retail displays. All items feature a rich, maroon label with bold white lettering above and below the familiar "4711" crest. Black and gold borders add a further note of color.

In addition all fluid items in the line boast a new frosted bottle with heavy wooden cap done in mahogany grain finish. Gift sets, pairing any two of the After-Shave Lotion, Eau de Cologne or Hair Dressing are available. Each of the items is offered also in individual acetate gift carton.

Also available now in a special gift box is "Sir" bath soap, and rounding out the line is the well-known shave stick.

Peggy Sage offers a novel package holding lipstick and nail polish. The cardboard box looks and opens like a book.

The scent of Desert Flower perfume by Leigh is now available in body sachet and dusting powder. The sachet bottle is decorated with flowers etched on glass.

Ferd. Mulhens, Inc. is featuring its newly designed Sir men's line, which includes 4711 Sir soap, eau de cologne, after shave lotion, hair dressing and a shaving stick.

Luxurious, Distinctive Beautifully Designed for Eye Appeal

These Exquisite HAND-BLOWN MINIATURES Help Sell Your Perfumes

BOUQUET FLORAL STOPPERS (Patented)
Made of tiny hand-painted shells as shown. In beautiful pastel shades. Fit any style bottle.

INTERCHANGEABLE SCREW STOPPERS
2 sizes available. This is our patented, exclusive leak-proof, air-tight stopper-applicator. They can be had in assorted colors, also "metalized" with gold or silver finish.

What woman can resist these delicate, jewel-like miniatures? Exquisitely wrought by master glassblowers, enchantingly decorated with hand-done floral designs and floral bouquet stoppers made of tiny colored shells, they have a luxury appeal that increases your perfume sales.

You can obtain G.I.I. miniature bottles and vials in many designs and decorative styles. Sizes range from a few drops to 1 oz. Exclusive designs can be created and produced on special order. Give your perfumes true distinction, eye appeal and memory value! Write today for the G.I.I. catalogue.

PATENTED SCREW STOPPER
All vials and miniatures feature our exclusive patented leak-proof, air-tight stopper-applicator.

GLASS INDUSTRIES INCORPORATED

DESIGNERS GII **MANUFACTURERS**

10 West 33rd Street — New York 1, N. Y.

High speed application

Leakproof sealing

Finger tip opening

Are your closures as good as your product?

If you're proud of your product, provide positive sealing with non-rusting, easy-to-open Alseco aluminum caps.

ALUMINUM SEAL COMPANY
RICHMOND, INDIANA
SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

OUR ENGINEERS SOLVED FUEL PROBLEMS TO KEEP UP YOUR GLASS SUPPLY

Maintaining a steady flow of containers to meet our customers' schedules is often more than a question of obtaining raw materials. During a recent fuel shortage, one of our glass plants faced a 50% curtailment of natural gas . . . the chief fuel for operating furnaces, feeders, ovens, and lehrs. A major production crisis developed and deliveries were threatened. We called on our Engineering Department for help, and they quickly installed fuel oil equipment on one furnace and put into operation a standby gas producer for another. Then a coal shortage developed which cut out the gas producer, and our engineers installed oil equipment on the second furnace. We thought we had the problem licked. Just about that time, the gas company ordered a 90% fuel curtailment, and with that allotment we could operate only 75% of our feeders and lehrs.

Then one of the engineers on the job disappeared. He hadn't deserted ship, for several days later he showed up with the answer to our problem. He had located and bought several oil gasifiers. We installed them promptly to furnish heat for the lehrs, feeders, and ovens, and as a result our service to customers was re-established on a normal basis.

When it comes to glass and closure problems, our large staff of technically trained men are resourceful above all. If you have a glass container problem, don't hesitate to ask for help. Engineers, designers, and chemists will gladly pitch in and provide you with the best answer experience and modern science can provide. For further information on any of Armstrong's glass or closures, contact your Armstrong representative or write direct to Armstrong Cork Co., Glass and Closure Division, 3810 Prince St., Lancaster, Pa.

Bottle No. 7314 is the ideal hand lotion bottle—the Empress closure, a decorative finishing touch.

IT PROTECTS AND BEAUTIFIES...

the container that's exactly right for your product!

The ideal package combines product protection with sales-attracting beauty and convenience. It's functionally suited to your product in every respect—the right size, the right shape, the right closure, *the right look.*

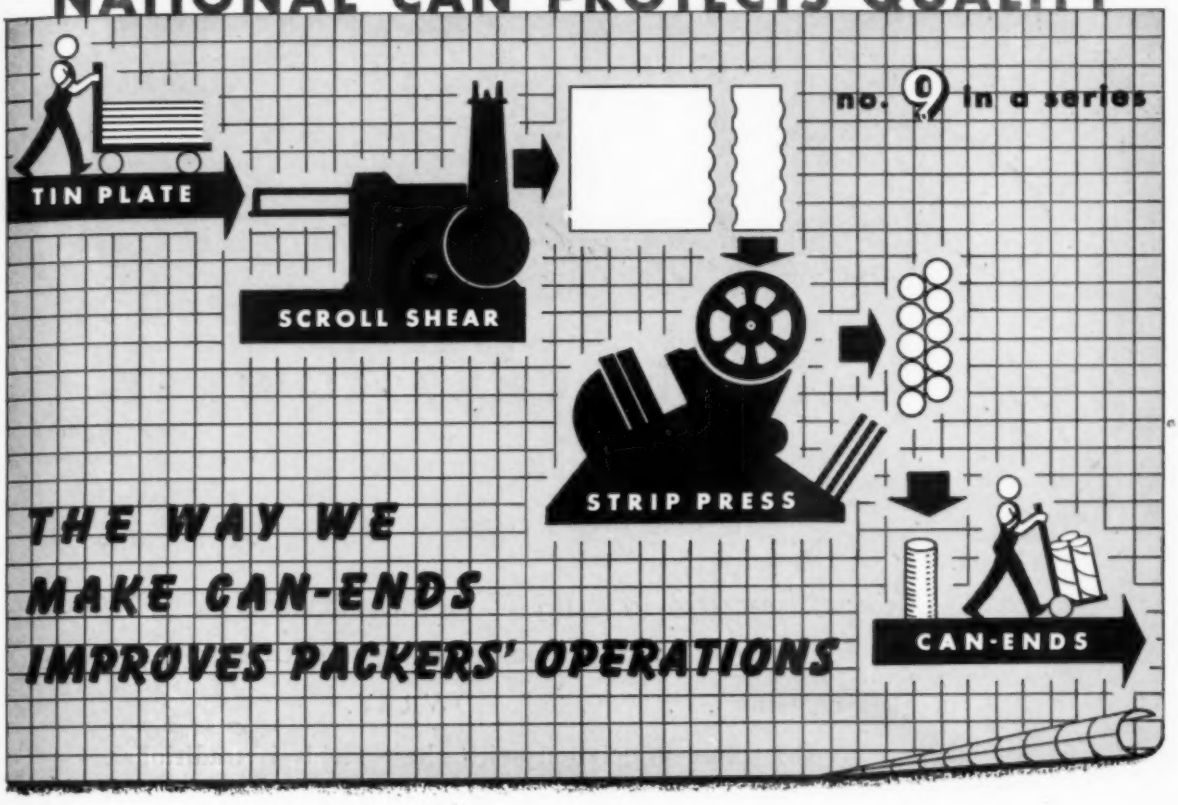
We suggest you look for this "exactly right" container in the stock Duraglas drug, chemical and toiletry line. There are more than 1400 different bottles for you to choose from...all are reliable protectors, as well as being lustrous backgrounds for a distinctive label.

After you've selected the container that fills your needs, choose an O-I closure, either plastic or metal—in businesslike black or brown, or a dressy pastel. It will complete a package that protects, beautifies *and sells* your product.

Duraglas TRADE MARK REG. U. S. PAT. OFF. CONTAINERS—Protectors of Quality

OWENS-ILLINOIS GLASS COMPANY, TOLEDO 1, OHIO Branches in Principal Cities

NATIONAL CAN PROTECTS QUALITY



To safeguard your product's quality and to improve your plant's operation, National Can Corporation does not stop at the air testing of the cans described in Number 8 of this series. The part of the can to be used last — the can-end for the can's top — is given the same care and handling as the can body receives.

Smoother work with fewer rejects at your double seamers is made possible by the extremely close tolerances maintained during National Can's end forming operations at scroll shears and presses. And the way National carries out compound lining and drying helps assure tight closing.

There's easier stacking at your double seamers, too, because of the way top ends are packed and shipped by National Can. This makes use of specially-wound tubular cartons which prevent can-ends from getting loose and damaging each other in transit.

NATIONAL CAN
CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

SALES OFFICES AND PLANTS IN: BALTIMORE, MD. · INDIANAPOLIS, IND. · CHICAGO, ILL. · MASPETH, N. Y. · HAMILTON, OHIO · CANONSBURG, PA. · BOSTON, MASS. · ST. LOUIS, MO.

Glass Containers

. . . by CARR-LOWREY

Products marketed by many of the most honored names in the cosmetic and drug industries are packaged in glass containers. . . by CARR-LOWREY.

Our close association with these fields is traditional.

For more than 58 years this organization has devoted its entire facilities to supplying packagers with glass containers made to the most exacting standards.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 500 FIFTH AVENUE (18) • *Chicago Office:* 1502 MERCHANDISE MART (54)

OPAL JARS • HANDMADE GLASS BOTTLES • MACHINE MADE FLINT GLASS BOTTLES

An experience in luxurious living

Fuller Bath Salts were created for women who appreciate the finer things in life. They bring to the daily bath a touch of luxury that makes it a more pleasurable experience.

Distributed by the Fuller Brush Company through its famous field organization, the attractive Fuller Bath Salts package is dependably sealed with a Crown Screw Cap. Here is an instance in which the closure is a definite aid to successful selling. It is attractively lithographed in color to blend with the label and form a highly attractive package. Precision accuracy of cap shells, correct liner material and uniform liner thickness assure dependable protection for the contents of each container. Fuller Brush Company is another of the many manufacturers who find that Crown Screw Caps are unsurpassed as a closure for fine cosmetic products. Crown Cork & Seal Co., Baltimore 3, Md. *World's Largest Makers of Metal Closures.*

CROWN CLOSURES

New Perfection DROPPING PARTS

Increase CONFIDENCE in Your Product

(1)

Non-rolling, extra-depth, Bakelite Cap; thick flange rubber part; Saftee ball glass.

The smart appearance and unfailing operation of New Perfection dropping parts will increase public confidence in your carefully compounded product. The unmatched dependability and cleanliness of these dropping parts assure complete customer convenience and satisfaction with your preparation.

New Perfection dropping parts are carefully made of the highest quality materials. They can be supplied in a wide variety of styles and sizes. Modernistic style bottles in Amber, Blue, Green, or Clear glass are available in 2 cc, 1/8, 1/4, 1/2, 1 and 2 oz. sizes.

(3)

Regular plastic cap; thin flange rubber part; semi-blunt glass.

New Perfection Dropper Glasses may be CALIBRATED in COLOR

New Perfection dropper glasses can be provided with calibrations for any specified dosages. The glasses are marked in color at levels which you indicate, making it easy and convenient for your customers if your product is to be administered in specific doses.

(2)

Metal cap; thin flange rubber part; special bent glass.

AMEKINE Non-Swelling Synthetic Rubber Parts

If your preparation has an oil base, we recommend rubber parts manufactured from our Amekine synthetic rubber. This rubber substitute, developed by Pennsylvania Glass Products, does not swell after long exposure to oil (as natural rubber does) which means that Amekine parts will continue to function properly for an indefinite time when used with oil products.

(4)

Single shell metal cap; non-swelling Amekine synthetic rubber part without strong odor; blunt glass.

Write for Samples and Quotations

PENNSYLVANIA GLASS PRODUCTS CO. INC.

"GLASS GOODS OF THE BETTER KIND"

428-432 NORTH CRAIG STREET . . . PITTSBURGH (13), PA., U. S. A.

ON IN A JIFFY...

the ¼ turn Anchor AMERSEAL Cap

★ *Speedy, low cost application*

★ *No thread matching required*

★ *Airtight, leakproof protection*

★ *Starts at any point*

★ *¼ turn seal*

★ *¼ turn removal*

★ *¼ turn reseal*

YOU'VE never seen anything like the Anchor Amerseal Cap for speed and ease of application. There are two reasons why . . .

First, the Amerseal Cap starts at any point on the container finish—there's no time wasted matching or adjusting threads.

Second, all it takes to effect the seal is a fast, simple ¼ turn by hand, hand chuck or machine.

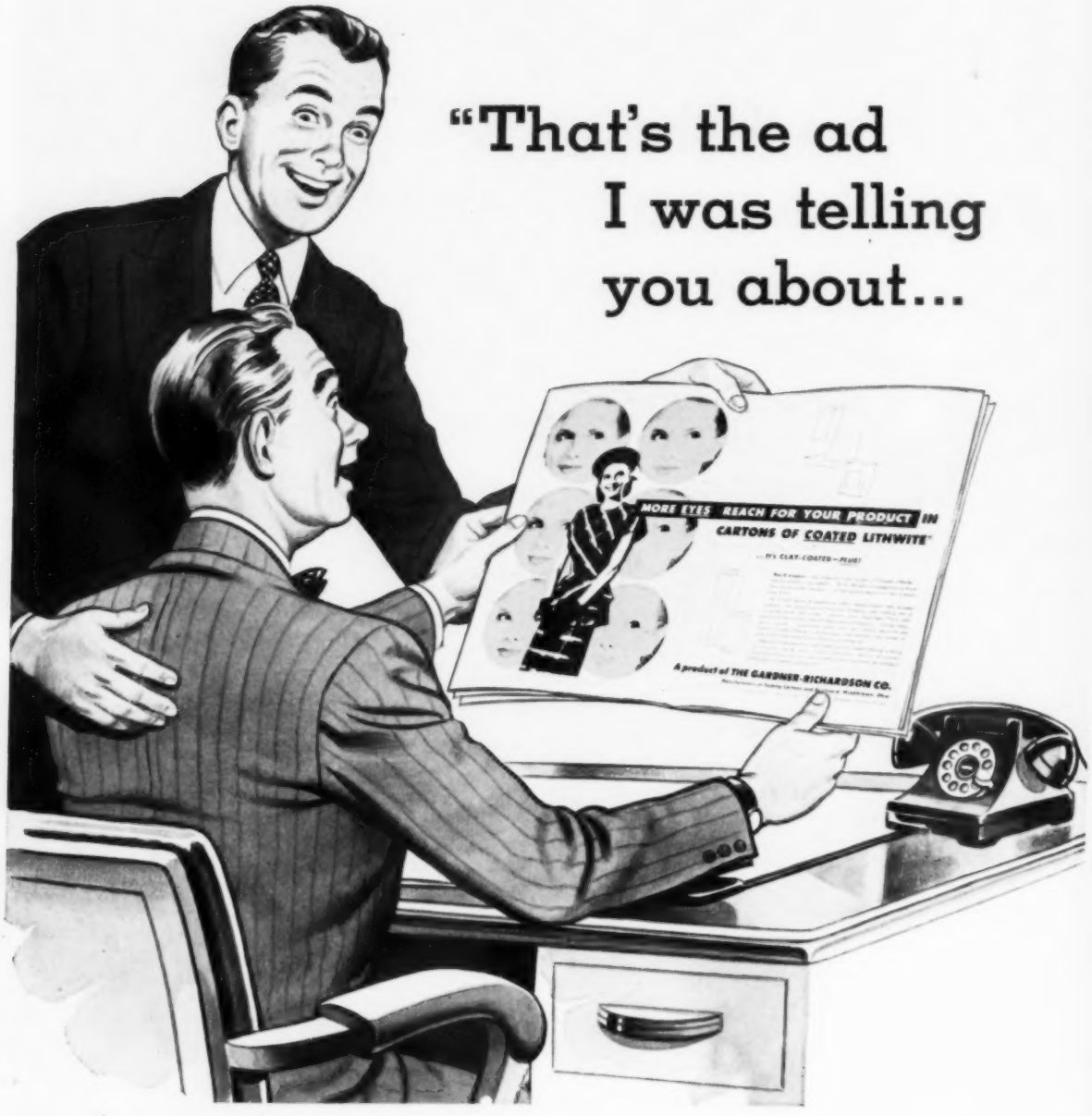
In application, the equally spaced Amerseal lugs engage the underside of the glass threads, draw the cap down and compress the liner in a tight, even, airtight, leakproof contact around the full 360° of the container finish.

In the housewife's hands removal is as fast and easy . . . a simple ¼ turn —a flick of the wrist—and the Amerseal Cap is off. And it reseals as tightly and effectively the hundredth time as the first . . . a great advantage for products which are used often—a little at a time—and requiring many effective reseals.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

Tune in "Crime Photographer" every Thursday evening, entire Coast-to-Coast Network, CBS


"That's the ad
I was telling
you about...
MORE EYES REACH FOR YOUR PRODUCT IN
CARTONS OF COATED LITHWITE*
A product of THE GARDNER-RICHARDSON CO.

If cartons of *COATED* LITHWITE* are that good we ought to look into them!"

IT'S CLAY-COATED PLUS! That's why Coated Lithwite is so white, bright, prints so brilliantly . . . puts extra eye-and-buy appeal into cartons. That's why it's rub-resisting, fade-resisting, too . . . makes positive seals . . . folds and scores without flaking or shattering.

THIS PLUS begins with the high quality base stock which reflects Gardner-Richardson's 89 years of papermaking experience. It's exactingly level; uniform in caliper. On this base stock the clay coating is evenly filmed by a precision process, pioneered by Gardner-Richardson—proved and improved by 8 years of carefully controlled production

INCREASED PRODUCTION of *COATED* LITHWITE now enables us to handle additional orders for *COATED* LITHWITE cartons. You will find it worth your while to investigate and see for yourself all the advantages of this clay-coated PLUS Board, in packaging your product. Write today.

More eyes reach for your product in cartons of *Coated* Lithwite

The GARDNER-RICHARDSON Company

MANUFACTURERS OF FOLDING CARTONS AND BOXBOARD, MIDDLETOWN, OHIO

*Reg. U. S. Pat. Off.

Sales Representatives in Boston • Chicago • Detroit • New York • Philadelphia • Pittsburgh • St. Louis

HOW TO MARKET YOUR PRODUCTS WITH CLEAN, SMOOTH, UNTORN LABELS

YOUR one best insurance toward an always clean, appealing package . . one that literally shouts aloud—"BUY ME, I'M BETTER"—is to entrust your label adhesive needs to PAISLEY. The swing in modern retail merchandising is toward self-service . . towards on-the-spot *impulse* buying. How necessary it is, then, to make certain that YOUR labeled packages look factory-fresh in the stores, with clean, smooth, untorn labels.

PAISLEY Labeling Adhesives are playing an increasingly important part in bringing products to market in perfect condition. If you want the ONE best labeling adhesive for a SPECIFIC operation, submit the facts to Paisley. Their skilled adhesive chemists will subject them to scientific laboratory analysis, then send you recommendations. This valuable service doesn't cost you a penny, nor does it obligate you to buy!

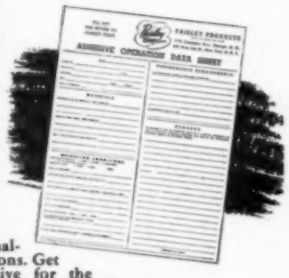
Here are some of the types of finer, field-tested adhesives developed by our scientific staff:

1. CARTON SEALING GLUES
2. AMPULE AND GLASS VIAL LABEL GLUES
3. BOTTLE LABEL GLUES
4. MOISTURE-RESISTANT LABEL CEMENT
5. GRIP-TIGHT LABEL PASTE
6. SHIPPING CASE GLUES

Free Consulting Service for All Adhesive Users!

SEND FOR THIS DATA SHEET NOW!

There's a laboratory-developed, tested and controlled PAISLEY scientifically designed Adhesive for practically every fabricating, manufacturing, product labeling and sealing operation. Buy adhesives the scientific way. Send for an Adhesive Operation Data Sheet. Fill in and return it to our laboratory for analysis and recommendations. Get the ONE best adhesive for the SPECIFIC operation. Write today. There's no obligation.



WRITE FOR FREE 8-PAGE ADHESIVE-FOLDER-"The SURE..The MODERN Way to Buy Adhesives!"

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Manufacturers of Glues, Pastes, Resin Adhesives, Cements, and Related Chemical Products

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BRIDGEPORT

Metal Cosmetic Containers

Caps and Closures

Perfume and cosmetic manufacturers for more than a quarter of a century have recognized the precision craftsmanship of Bridgeport Metal Cosmetic Containers.

The consistent uniformity and beauty of our products has resulted in many leading manufacturers remaining as consistent users of Bridgeport Metal Containers.

When you are again planning a product that requires an original design be sure to examine the fine precision and decorative beauty of Bridgeport Products.

Bridgeport Produces

- Vanities
- Jar Caps
- Bottle Caps
- Lipstick Containers—Swivel, Slide, Automatic
- Dry and Paste Rouge Cases
- Powder Boxes
- Perfume Vial Cases and Caps
- Lip Brushes
- Drawn Talc Containers
- Miscellaneous Make-up Cases and Other Metal Specialties

THE BRIDGEPORT METAL GOODS MFG. CO.

Established in 1909

BRIDGEPORT, CONN.

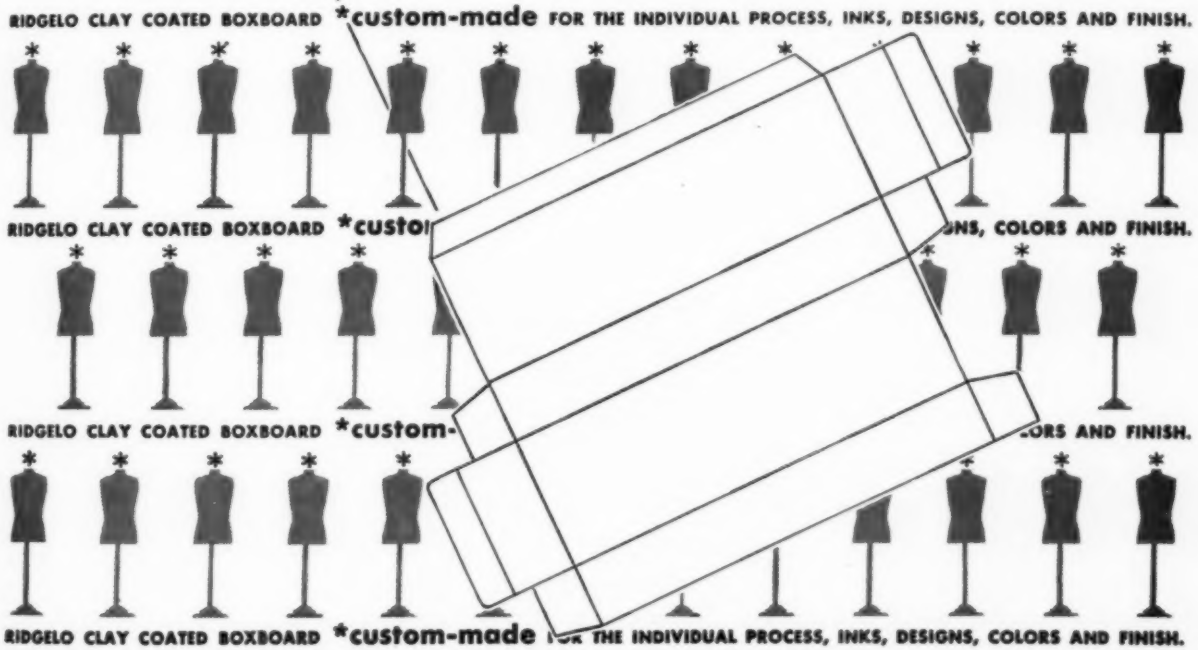
PHONE BRIDGEPORT 3-3125

Ridgelo
CLAY COATED
BOXBOARDS

One of the finest boxboards no experimenting – quality assured!

For years carton makers have used
Ridgelo Clay Coated for their best work.
The time-testing is over.
Producers know that it comes to them ready for one special job.
It is made by specifications for
* the process, the inks and design.
It is available for varnish and in litefast colors.
In a word Ridgelo is "custom-made".
Folding box users see the result in bright, smooth cartons.
At very small extra cost they are first in winning attention and approval.
Keep up with the leaders—
buy cartons of Ridgelo Clay Coated.

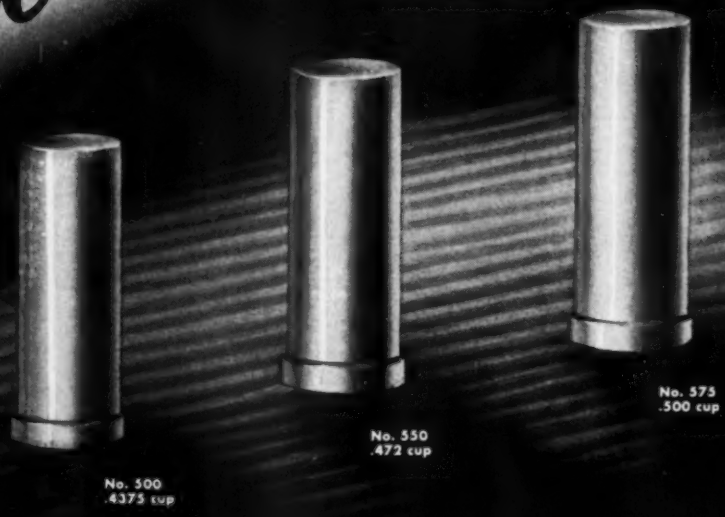
MADE AT RIDGEFIELD, N. J., BY LOWE PAPER COMPANY


RIDGELO CLAY COATED BOXBOARD *custom-made FOR THE INDIVIDUAL PROCESS, INKS, DESIGNS, COLORS AND FINISH.
RIDGELO CLAY COATED BOXBOARD *custom-made FOR THE INDIVIDUAL PROCESS, INKS, DESIGNS, COLORS AND FINISH.

REPRESENTATIVES:
H. B. Royce, Detroit • Norman A. Buist, Los Angeles • A. E. Kellogg, St. Louis • Philip Rudolph & Sons, Inc., Philadelphia

Rich Low BRASS

SWIVEL LIPSTICK CONTAINERS



"Fashioned Like Jewels"

THE ULTIMATE IN QUALITY

- De Luxe polished Rich Low brass — baked lacquer finish
- Free wheeling mechanism — It is impossible for the filler to swivel up while the cap is on
- "Click-Tite" closure*

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BRODER INDUSTRIES

INCORPORATED

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*Patents Pending

TO INCREASE PROFITS...
reduce packaging costs with

ANCHORGLASS
Standard Containers

- Speed production
- Easy, fast filling
- Fast labeling
- Simplify inventories
- Reduce shipping costs
- Lightweight—strong
- Cost less than non-standard shapes

THE adage "A penny saved is a penny earned" is a most timely one to consider when analyzing your packaging costs. The production advantages of Anchorglass standard containers on your lines can mean a great many pennies saved and more profitable operations for you. Here's how:

Standard shapes speed production—handle faster than odd-shaped containers. You'll get long production runs with minimum downtime for changeovers... at the same time simplifying your glass container inventory problem. And standard, rounded shapes mean simplified, fast label application.

Shipping costs are reduced because Anchorglass standard containers are lightweight. There's economy in cartons, too, because standard shapes waste no space—permit the use of smaller cartons. And naturally, Anchorglass standard containers cost less than non-standard shapes.

It's a fact that if you can keep costs down, profits will go up. And you can do just that with Anchorglass standard containers.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

Tune in "Crime Photographer every Thursday evening, entire Coast-to-Coast Network, CBS.

Fabricated by:
Plastic Artisans Inc.,
White Plains, New York.

show business is good business...

show what you're selling in VUEPAK

For eye-catching, salesmaking displays—as well as individual "showcase" packages—look to transparent, rigid Vuepak.

This versatile Monsanto packaging material fabricates readily and economically by the fastest mass-production methods. It combines with a wide variety of other materials.
With a touch of imagination, you can have a display every bit as attractive and buy-appealing as this one by John Fredericks.

And you can be sure of a warm retailer reception for displays of Monsanto Vuepak. They earn spotlight counter positions because they are light weight, easy to handle, and protect and preserve their contents.

When it's sales you're after, through a package or a display, get the facts about Vuepak first. See your box supplier . . . or write direct: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Mass.
In Canada, Monsanto (Canada) Limited, Montreal.

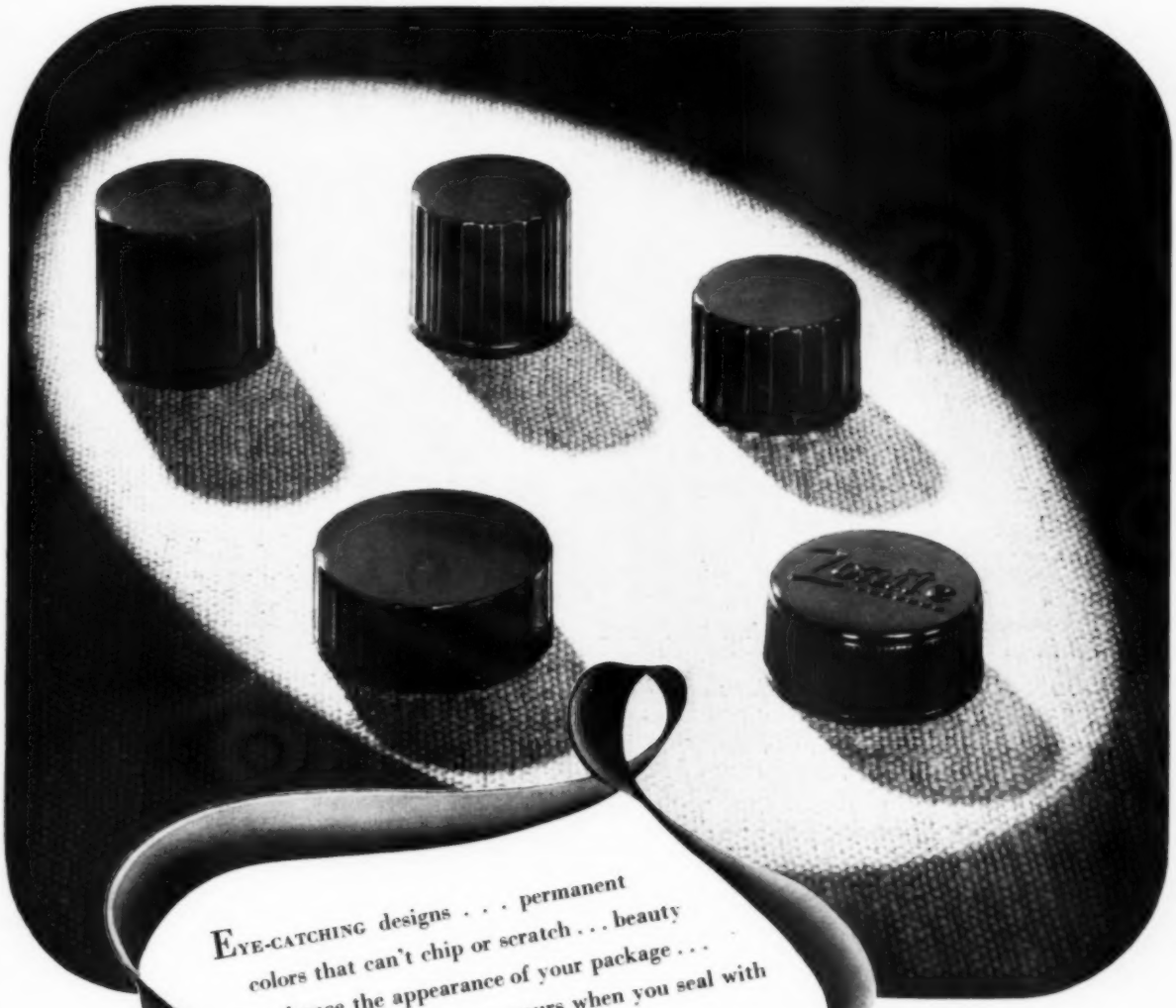
VUEPAK

Vuepak: Reg. U. S. Pat. Off.

MONSANTO
CHEMICALS — PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND

Highlight ON SALES APPEAL...



EYE-CATCHING designs . . . permanent colors that can't chip or scratch . . . beauty to enhance the appearance of your package . . . all these and more are yours when you seal with plastic closures.

Helping you select the proper design for your private mold closure or container is part of our service. Or, if you prefer, you may choose from a wide range of plastic caps of standard designs and sizes.

STANDARD *Cap & Molding* COMPANY, *Inc.*

Molders of Plastic Closures

307 S. EATON STREET, BALTIMORE 24, MD. • *Offices in Principal Cities*

If You Want to Stretch Your Packaging Dollar

There are several ways in which LUSTEROID vials and tubes make your packaging dollars go farther.

- Their feather-light weight cuts shipping costs.
- Their great strength eliminates the need for special partitioning and protective packing.
- Their printability saves on labeling because your message can be printed as an integral part of the package.

On top of these substantial savings, LUSTEROID provides product visibility with complete product protection, wide color selections to meet today's merchandising requirements, and standard sizes from ¼" to 1¼" in diameter and lengths up to 6". Cork, slip-on or screw-cap closures.

Write for details.

LUSTEROID CONTAINER CO., Inc.
Formerly Lusteroid Division of Sillcocks-Miller Company

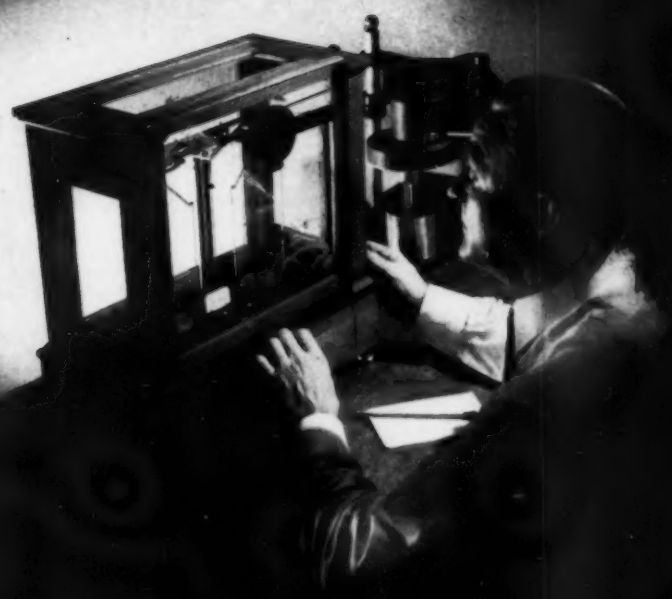
Office and Factory
10 W. PARKER AVENUE, MAPLEWOOD, N. J.
MAILING ADDRESS: SOUTH ORANGE, N. J.

Top off YOUR BOTTLE OR JAR *with a* RICHFORD METAL CLOSURE

Any Size *Plain or Embossed* *Any Shape*
or
Designed and Manufactured to your Specific Requirements

RICHFORD CORPORATION
221 Fourth Avenue, New York City
Represented in: St. Louis, Kansas City, Chicago, Los Angeles, Pittsburgh, Cincinnati, Minneapolis

SCIENCE...GUARDIAN OF QUALITY*



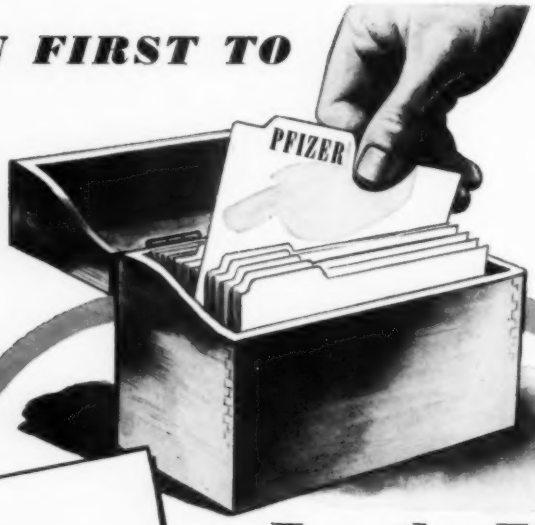
BERNARDIN
Metal Closures

In making Bernardin Closures, we employ not only countless precautions taught us by 66 years of experience, but utilize every known efficiency afforded by modern science and invention... All to justify the confidence of a distinguished and growing clientele that uses more and more millions of Bernardin Closures each year. Bernardin Bottle Cap Company, Evansville, Ind.

*Pictured — The balance scale shown is so sensitive that it will weigh an eyelash. The Viscosimeter (at right) gives accurate viscosity determinations. Both instruments are vital to Bernardin laboratory and factory control work.

Since 1881—America's First Manufacturer of Metal Closures

TURN FIRST TO PFIZER



PFIZER VITAMINS

Ascorbic Acid
Riboflavin
Thiamine Hydrochloride
Niacin and Niacinamide
Calcium Pantothenate
Pyridoxine Hydrochloride

PFIZER GLUCONATES

Calcium Gluconate
Ferrous Gluconate

PFIZER OXALATES

Ammonium Oxalate
Potassium Oxalate
Iron and Ammonium Oxalate (Ferric)
Iron and Sodium Oxalate (Ferric)
Iron Oxalate

PFIZER CITRATES

Sodium Citrate
Iron and Ammonium Citrate (Green)
Iron and Ammonium Citrate (Brown)

For the Fine Chemicals You Need

• Pharmaceutical manufacturers, and users of fine chemicals for other industrial purposes turn first to Pfizer. With many, the deciding factor is their own experience with the consistently high quality of Pfizer products. With others, in addition to consistently high quality, it is the Pfizer ability for almost one hundred years to combine high quality with large scale production.

Chas. Pfizer & Co., Inc., 81 Maiden Lane, New York 7, N. Y.;
444 West Grand Avenue, Chicago 10, Illinois;
605 Third Street, San Francisco 7, Calif.

PFIZER

Manufacturing Chemists Since 1849

NEWS...

Dr. Lulek Heads Heyden Ammonia Division

Dr. Ralph N. Lulek has been named manager of the ammonia division of the Heyden Chemical Corp. He has been research manager of Heyden since 1946 and last summer was in charge of the

DR. R. N. LULEK

organization and rehabilitation of the Morgantown Ordnance Works to produce ammonia for the fertilizer program. In addition to these duties, Dr. Lulek also has been for some time manager of the antibiotic division of the company.

The holder of more than 50 patents in the field of dyes and intermediates, Dr. Lulek was born in Austria and obtained his Ph.D. degree from the University of Graz in 1924 coming to this country in 1925.

He was employed for 18 years by E. I. du Pont de Nemours & Co., in the research department of organic chemicals. Befor joining Heyden he was named manager of alcohol and solvents plants for Publicker Industries, Phila.

Towle Named to New Spot

Edward C. Towle has been named pharmaceutical production manager of Sharp & Dohme, Inc.

Mr. Towle formerly was with Lever Brothers Company, where he served as coordinator of pharmaceutical manufacturing operations until Lever discontinued its pharmaceutical division. He then served in the quality control department of the general manufacturing division.

Before his connection with Lever, Mr. Towle was a research chemist for the Rexall Drug Company. He is a graduate of the University of New Hampshire where he received his M.S. in Chemistry in 1927.

Lehman Elected Vice President of TGA

H. J. Lehman, president of the Wildroot Co., Inc., Buffalo, has been elected vice president of the Toilet Goods Association, succeeding William M. Bristol, Jr., vice president of Bristol-Myers Company.

Mackner Upped By Merrell

Nelson Gampfer, vice president and general sales manager of the Wm. S. Merrell Company, has announced the appointment of Arnold F. Mackner as central division manager. Mr. Mackner succeeds Fred C. Schuler, who in 1946 became assistant sales manager in charge of distribution.

Mr. Mackner, a graduate of the University of Minnesota, College of Pharmacy in 1932, joined the Merrell organization in 1940 as a representative in the Fort Wayne area.

Philip C. Sayres, executive vice president of Bristol-Myers Co., and Dr. Amel R. Menotti, director of research of Bristol Laboratories Inc., before they sailed on the Queen Mary for a two month's trip to Europe where they will meet various leaders in pharmaceutical research.

DCAT Elects Officers

The Drug, Chemical and Allied Trades Section of the New York Board of Trade at its 57th annual meeting elected a new executive committee to serve for the next fiscal year. Officers are: Chairman, Fred J. Stock, vice president of Chas. Pfizer & Co., Inc.; Vice president, Robert B. Magnus, Magnus, Mabee & Reynard, Inc.; Treasurer, Hugh S. Crosson, McKesson & Robbins, Inc.; Secretary, Helen L. Booth. Carl M. Anderson, asst. to president, Merck & Co., Inc., was reappointed counsel.

The personnel of the new executive committee exclusive of the officers are:

FRED J. STOCK

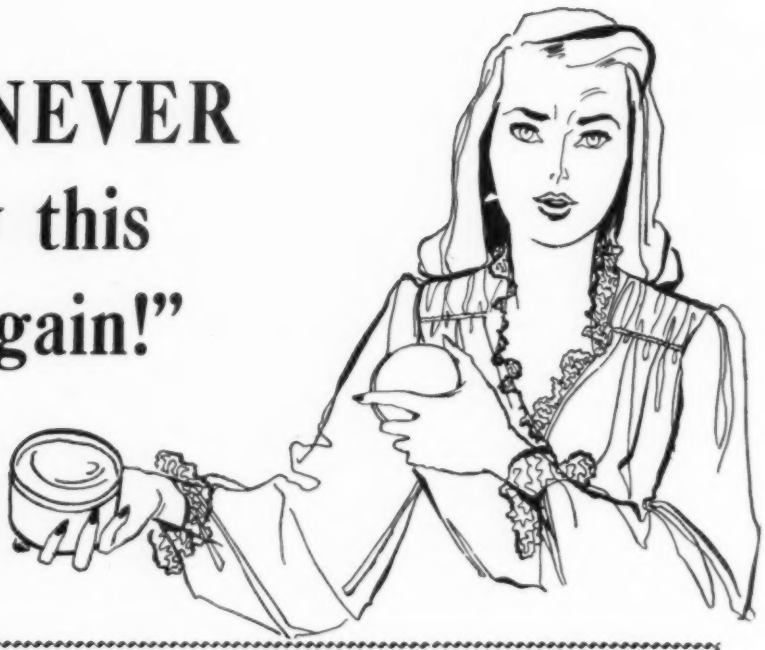
William T. Allen, Topics Publishing Company; Stanley I. Clark, Sterling Drug Inc.; James DeCesare, White Laboratories, Inc.; F. S. Dietrich, Mennen Company; James G. Flanagan, S. B. Penick & Company; Dr. Russel J. Fosbinder, The Maltbie Chemical Company; Harold C. Green, L. Sonneborn Sons, Inc.; Robert L. Hutchins, Commercial Solvents Corp.; Charles M. Macauley, Pro-phy-lac-tic Brush Co.; John P. Remensnyder, Heyden Chemical Corp.; Clark, Rogers, Owens-Illinois Glass Co.; E. L. Shattuck, Abbott Laboratories; Fred J. Singer, E. I. duPont de Nemours & Co., Inc.; Gerald L. Smith, American Home Products Corp.; Lloyd I. Volckening, The Ivers-Lee Company; Charles P. Walker, Jr., Citro Chemical Company.

Harold M. Altshul, president of the Ketchum & Co., Inc., was elected section representative to the Board of Directors of the New York Board of Trade.

Sobell Leaves Rubinstein

Otto H. Sobell has announced that he has left Helena Rubinstein, Inc., and H. R. Laboratories, Inc.

"I'll NEVER buy this again!"



Women are critical. They just don't like *products that "settle out" or have a watery or curdled appearance. Give yours an even and* lasting *distribution of color and body with Kraystay*

Don't underestimate the value of a *good* stabilizer. If it stops separation, curdling or "settling out," it may be as important as the most costly ingredient.

Many alert manufacturers are now improving their products with Kraystay. This remarkable vegetable stabilizer gives many products an even and *lasting* distribution of color and body.

Used in varying proportions, Kraystay has unusual stabilizing, emulsifying, thickening, suspending and gelling properties. It is adaptable for use in cream lotions, hand lotions, toothpaste, cosmetics, pharmaceuticals, foods, and many other products of medium or low acidity.

Find out more about Kraystay. Call or write today stating the nature of your product. Or, if you wish to submit your formula, Kraft technicians will be glad to assist you in the application of Kraystay to it. Kraft Foods Company, Dept. Y-20, 500 Peshtigo Court, Chicago 90, Illinois.

FROM TINY FRONDS OF CARRAGEEN (edible Irish moss) gathered from the cold ocean floor, Kraft extracts a clear, pure vegetable gelose for use in the manufacture of Kraystay. Modern scientific laboratory control insures the uniform high quality of this consistently efficient stabilizer.

KRAYSTAY

MADE BY KRAFT

A NEW DEVELOPMENT IN VEGETABLE STABILIZERS

Winans in Colgate Post

Clifford Winans has joined the Colgate-Palmolive-Peet Company to work with C. D. Pearce in the Company's syndicate store sales department.

CLIFFORD WINANS

Mr. Winans joined F. W. Woolworth Company in 1924 as a clerk and later become associated with S. H. Kress & Company as assistant buyer in the toilet articles department. He was advanced to the position of head buyer in 1938, when he left to join the Don Juan Company, Inc., as director of syndicate store sales.

Metalsalts New President

Robert J. McEwen has been named the new president of Metalsalts Corporation, Hawthorne, N. J., succeeding William M. Sticeh, who has formed the William M. Sticeh & Co., to handle sales and distribution of industrial and agricultural chemicals.

Medal Committee Announced by Society of Cosmetic Chemists

Recognizing that cosmetic chemists get little recognition for their achievements, President Emil G. Klarmann of the Society of Cosmetic Chemists, announced the formation of a "Medal Committee" whose duty it shall be to designate that member of the Society who, in the committee's opinion, has made the most outstanding contribution to cosmetic chemistry, technology or related discipline. The award is to be made annually at the December meeting.

Dr. Curt P. Wimmer, well-known pharmacy and cosmetic teacher, is chairman of the Medal Committee. The other members will be the three leading trade journals of the cosmetic industry and a scientific representative of The Toilet Goods Association. Representing Drug Trade News is Dr. D. F. Chichester; Drug and Cosmetic Industry is represented by Mr. T. R. Farrell; The American Perfumer is represented by M. G. deNavarre; and The Toilet Goods Association is represented by H. Goulden.

In making the appointments, Dr. Klarmann requested the committee to have ready for presentation a suitable design for the medal at the next meeting of the Society which will be held at the Biltmore Hotel on Wednesday, December 3rd, in New York City.

Kaness Named Special Representative For Knox

R. R. Underwood has announced the appointment of H. L. Kaness as special representative for Knox Glass Associates, Inc. His duties in the new position include customer contact along with sales co-ordination.

Mr. Kaness was formerly associated with Knox prescription sales in the

H. L. KANESS

Chicago territory and for the past five years has been director of central purchases.

Dr. Wetterhahn With Gaylord-Shelton

Dr. Julius Wetterhahn, formerly with Associated Distributors has joined Gaylord-Shelton, manufacturers of hair preparations, in Chicago.

Hooker Adds to Sales Staff

John M. Glaze has been transferred to the New York sales office of the Hooker Electrochemical Company. During the past year he was associated with the sales department of the Niagara Falls office.

A graduate chemist of Dartmouth, Mr. Glaze joined Hooker in 1942 as a research process foreman and has been also associated with the purchasing department.

A. C. Meyer Honored by St. Louis Drug Assn.

The Drug, Chemical and Allied Trades Association of St. Louis has installed the following new officers: Horton H. Oliver of the Tilden Co., president; R. Sidney Herman, The Dr. J. H. McLean Medicine Co., second vice president; and Robert R. Rosenthal, Superior Folding Box Co., secretary-treasurer. Richard T. Dunn, Dick Dunn Drug Products Co., is chairman of the board.

The Association also honored A. C. Meyer, vice president of Meyer Bros., Drug Co., who recently celebrated his 75th birthday as well as 56 years in the drug business.

Another Member in Fritzsche Quarter Century Club

On September 9 Miss Anna Venice became the sixth member this year to join the Fritzsche Brothers, Inc., Quarter of a century Club. Twenty-two persons including club members and directors of the firm feted and dined Miss Venice at the New York Athletic club.

Miss Venice received a gold wrist watch from her fellow employees and a Government bond from the board of directors presented by president F. H. Leonhardt.

McNitt Advanced by Bristol Labs.

James D. McNitt, plant manager of Bristol Laboratories Inc., has been elected assistant vice-president of the Company.

McNitt, who joined Bristol Laboratories in March, 1944, as a chemical engineer, is a graduate of Antioch College and received his M.A. from M.I.T.

J. D. McNITT

in 1941. From 1940 to 1944 he was an assistant professor at M.I.T. and was head of Bangor Station of the M.I.T. School of Chemical Engineering Practice.

Moser, Gen. Manager of Ayer

John P. Moser, formerly a member of the technical staff of Lever Brothers Company, has been named general manager of Harriet Hubbard Ayer, Inc.

JOHN P. MOSER

For the past twenty-two years, Mr. Moser has been associated with Lever Brothers in a wide variety of administrative tasks, ranging from product development to packaging. He is a graduate of Tufts College.

Neimeth Heads Philanthropic Drive

Edward Neimeth, president of the National Magnesia Company, Inc., and of the newly formed Maimonides Hospital of Brooklyn, has been named associate chairman of the Federation of Philanthropies of New York, Victor S. Riesenfeld, general campaign chairman announced early this month.

Malmstrom Moves to New Chicago Office

N. I. Malmstrom and Company have increased the facilities of the Chicago office by moving to new and larger quarters at 444 West Grand Ave., Chicago 10. Mr. Stephen T. Goode will continue to be in charge of Malmstrom's Chicago office.

Two Advanced By Monsanto

R. L. Bauer and R. E. Lentz have been appointed assistant managers of the process section of the Monsanto Chemical Company's general engineering department. Mr. Bauer will be the senior assistant. He is a native of St. Louis, and started with Monsanto in 1937. For a while he was in charge of production for the W. G. Shelton Company and for the National Compounding and Chemical Company. He rejoined Monsanto in 1945 as a member of the general development department and was transferred to the process section of the general engineering department in 1947.

Mr. Lentz is also a native of St. Louis and graduated from Washington University in 1940, he was employed by Monsanto that year as a research chemical engineer at Anniston, Ala., and was transferred to Dayton, Ohio, in 1942 where he worked on the development of composite rocket propellants.

Heads Factor's N. Y. Buying Office

Julius Weinstein has been appointed manager of the New York buying office of Max Factor & Company, located at 730 5 Ave.

Lewis Resigns From Norwich

Joseph T. Lewis has resigned as president and a director of the Norwich Pharmacal Company, Ltd. of Canada. Mr. Lewis had been with the company since 1928 and first worked in the company's West Central division in Chicago. Following assignment to various positions in that branch he came to the Norwich home office in the fall of 1938. He was subsequently made a vice president of the parent company and in 1947 became president of the Canadian subsidiary.

Operation of the Canadian Company will be under the direct charge of George M. Channing of Toronto, vice president of the subsidiary.

Parsons Shifted to Mid-West

The New Jersey Machine Corporation announces the transfer of James F. Parsons, Jr., sales engineer from its Hoboken office, to the middle west to cover the Missouri and southern Illinois territory.

JAMES J. PARSONS

Mr. Parsons will make his headquarters in the Chicago office at 325 W. Huron St.

L. I. Corp. in New Location

Chemo Puro Mfg. Corp., Long Island City, has moved to a new location at 26-32 Skillman Ave., L.I.C. The move incorporates plant, office, shipping and packing facilities under one roof. Telephone number remains the same, Ironsides 6-7036.

Officers and executive committee of the Triple E Club of New York, comprised of men interested in the export of ethical medicinal products. Seated from left to right are: John F. Gallaway, export manager, Wm. S. Merrell Co.; John W. Hart, vice president, Winthrop Chemical Co.; Oliver Shaw, foreign sales manager, The Maltine Company; Robert F. Volentine, ass't foreign sales manager, Schering Corp. Standing: E. M. Saravia, Export advertising manager, Sharp & Dohme, Inc.; Franz Euler, export manager, Merck & Company; Robert Bogen, export manager, Lederle Labs.; and Richard T. Turner, editor, Pharmacy International and El Farmaceutico.

Penicillin by Baker
READY FOR YOUR LABEL
4 TYPES NOW AVAILABLE
1 Crystalline Penicillin G Sodium in vials—100,000, 200,000, and 500,000 units.
In bulk containers—50 million and 100 million units.
2 Penicillin in Oil and Wax (Calcium Amorphous or Sodium Crystalline) in cartridges, vials and bulk containers to meet specifications.
3 Amorphous Penicillin Sodium in vials—100,000, 200,000, and 500,000 units.
4 Amorphous Penicillin Calcium in bulk containers—10 million, 50 million, and 100 million units.
For tablet manufacturers Baker offers both Amorphous Penicillin Calcium and Crystalline Penicillin Sodium in bulk.
Inquiries are invited by drug and pharmaceutical companies who want a dependable source of supply.
For further facts write J. T. Baker Chemical Co., Executive Offices, Phillipsburg, New Jersey.
Baker's Chemicals
C. P. ANALYZED • FINE • INDUSTRIAL

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for BATH CRYSTALS

- Uniform size and brilliant sparkle in each crystal
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- Will not change physically or chemically in the package
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- Low cost

Give your bath-crystals package a head start on the market with Solvay SNOWFLAKE CRYSTALS! These beautiful true crystals have a glisten and sparkle . . . a breath-taking eye appeal that creates immediate consumer acceptance.

But this eye appeal—important as it is in producing sales—is not the whole story. *Your product will maintain its leadership* when you use Solvay SNOWFLAKE CRYSTALS because of the *plus factors* that you get along with the beauty. Check the complete list of advantages that SNOWFLAKE CRYSTALS offers you . . . then picture your label on a package of these perfectly performing bath crystals.

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SOLVAY SNOWFLAKE CRYSTALS

*Trade Mark Reg. U. S. Pat. Off.

Sharp & Dohme Elections

John S. Zinsser has been elected chairman of the board, and William L. Dempsey elected president of Sharp & Dohme Inc., succeeding Mr. Zinsser.

WILLIAM L. DEMPSEY

Dr. William A. Feirer was elected executive vice president succeeding Mr. Dempsey. Dr. Feirer, formerly vice president in charge of medical research, was also elected a director of the Company. Mr. Zinsser will remain as in the past, chief executive officer of Sharp & Dohme.

Mr. Dempsey graduated from Princeton University in 1917 and spent two years in the Army Air Corps during World War I. In 1929, he became associated with Merck & Company, and joined Sharp and Dohme in 1936. For the first year he served in an advisory capacity, then as assistant to the president. In 1938 he was elected executive vice president in which capacity he served until his election to the presidency.

Dr. Feirer got his medical degree from the Johns Hopkins University

DR. W. A. FEIRER

School of Medicine in 1930. He joined Sharp & Dohme research staff in that year and, except for two years, 1932-34, when he was recalled to Johns Hopkins to do special work, has been with the company ever since.

In 1936, Dr. Feirer was appointed director of the company's biological laboratories and the following year was named medical director. He was appointed director of the medical research division in 1940 and was elected vice president in charge of medical research in 1942.

Alexander Resigns From Carlova and Lander

A. Alexander has resigned from all offices held in Carlova, Inc., and Lander Co., Inc., where he was connected in technical and manufacturing operations for almost 24 years.

Schimmel Appoints Consultant

Schimmel & Co., Inc., announce the appointment of Roy J. Huttleston, to the staff of its perfumery laboratory and, at the same time, to its sales staff,

ROY HUTTLESTON

where his specific assignment will be to provide technical advice and assistance to customers.

Mr. Huttleston comes to Schimmel from Cincinnati, where he was a perfume chemist with Proctor & Gamble for many years, before this he was with the Palmolive Company in a similar capacity.

Allen Leaves Package Machinery Sales

M. N. Allen of the Package Machinery Company's Chicago office, has resigned. He plans to make his temporary residence in Saginaw, Mich.

The Chicago office will be handled by Ernie Hjelm, formerly in charge of the Atlanta office, and Ed. Wagner, who has been transferred from Springfield to Chicago.

George Woody, is replacing Mr. Hjelm and has taken charge of the Company's Atlanta office.

Straka Rejoins Colgate

J. A. Straka has rejoined Colgate-Palmolive-Peet Company as vice president and general manager of the toilet articles department. He had been

J. A. STRAKA

executive vice president with Yardley of London, Inc.

Mr. Straka first joined the company 23 years ago. In 1931 he was assigned to the Colgate foreign department and served as general manager in Poland. At the outbreak of the war he returned to this country and was appointed general manager of the Kirkman division.

Foster-Forbes New Catalog

The Foster-Forbes Glass Company, Marion, Ind., have put out its first post-war catalog, illustrating and describing the company's new lines of bottle styles for cosmetic and toilet preparations.

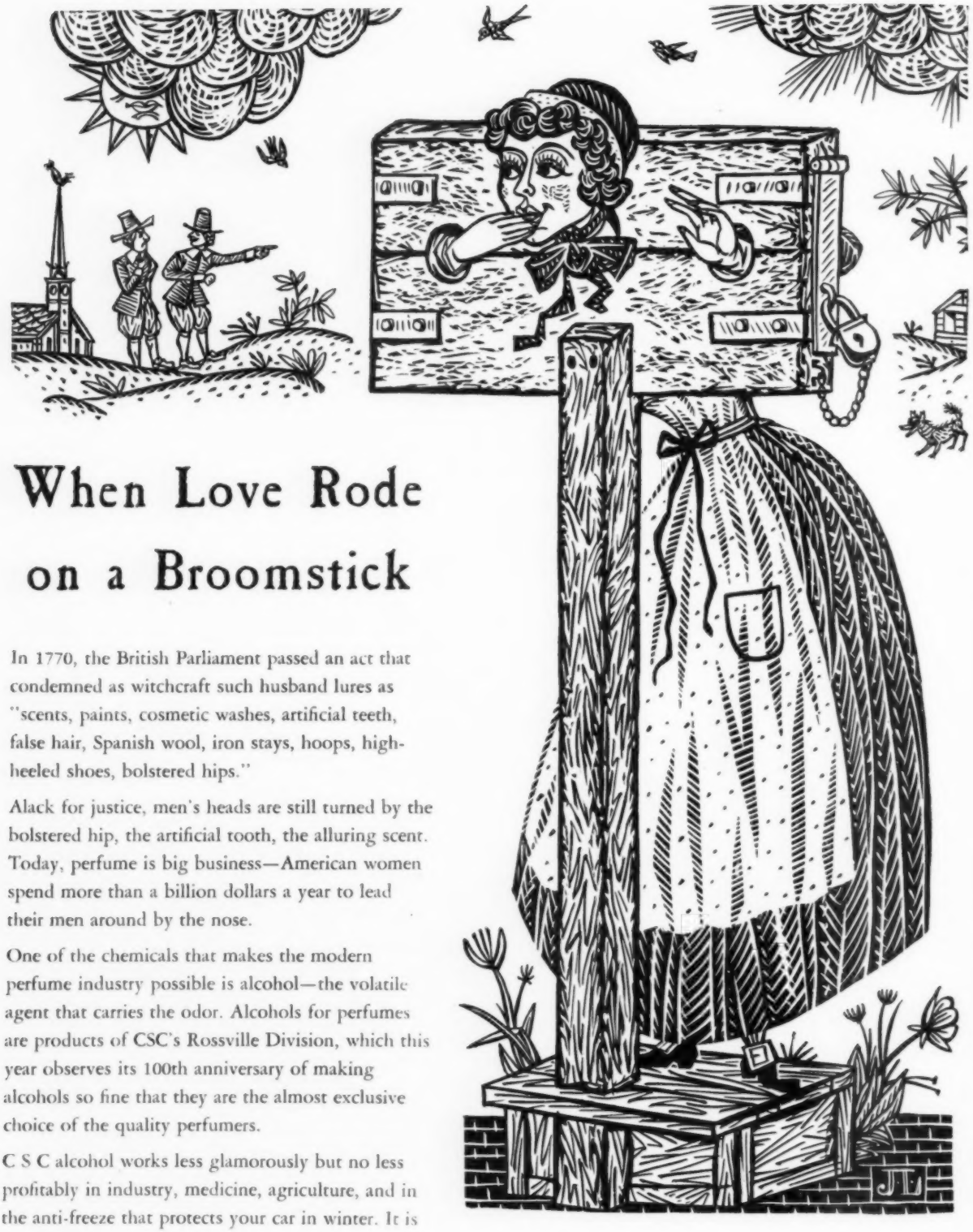
Ullyot Heads ACS Division

Dr. Glenn E. Ullyot of Philadelphia, has been elected vice chairman of the

DR. G. E. ULLYOT

division of medicinal chemistry of the American Chemical Society.

Dr. Ullyot is head of organic research at Smith, Kline & French Laboratories. He received his doctor's degree from the University of Illinois in 1938.



When Love Rode on a Broomstick

In 1770, the British Parliament passed an act that condemned as witchcraft such husband lures as "scents, paints, cosmetic washes, artificial teeth, false hair, Spanish wool, iron stays, hoops, high-heeled shoes, bolstered hips."

Alack for justice, men's heads are still turned by the bolstered hip, the artificial tooth, the alluring scent. Today, perfume is big business—American women spend more than a billion dollars a year to lead their men around by the nose.

One of the chemicals that makes the modern perfume industry possible is alcohol—the volatile agent that carries the odor. Alcohols for perfumes are products of CSC's Rossville Division, which this year observes its 100th anniversary of making alcohols so fine that they are the almost exclusive choice of the quality perfumers.

C S C alcohol works less glamorously but no less profitably in industry, medicine, agriculture, and in the anti-freeze that protects your car in winter. It is one of more than 200 chemicals produced by C S C.

CSC COMMERCIAL SOLVENTS CORPORATION, 17 EAST 42ND STREET, NEW YORK 17, N. Y.

Watson Joins Fleuroma

Rupert C. Watson has joined Fleuroma, Inc., New York as sales manager, Walter Lengsfelder, president of the company, has announced.

WALTER LENGSFELDER

Mr. Watson has more than twenty years of sales administration and advertising experience in the essential oil and allied industries. Beginning his career in 1924 with the "Drug and Chemical Markets" trade journal, Mr. Watson was successively with the "Oil, Paint

RUPERT WATSON

and Drug Reporter," Ungerer and Company and for the past twelve years as American resident partner and managing director of Firmenich and Company.

Perfumers Society Adopts Constitution

In an active and interesting meeting, the American Society of Perfumers adopted a constitution and by-laws which formally establishes this organization as a new, scientific, professional society in America.

This organization which met at the Advertising Club of New York will meet once a month at this location.

The purpose of the organization, as stated in a preamble to the constitution, is "to advance the art and science of perfumery in the United States and to encourage and promote good fellowship and professional discourse among its members." The society will have as members: active, apprentices and honorary membership.

The officers of the American Society of Perfumers, elected at a previous meeting, are W. H. Dunney, Sr. of Ungerer & Company, President; A. Frascotti of Firmenich & Co., Inc., Vice-President; Wm. H. Barlow of Orbis Products Corp., Secretary and R. E. Hauck of Dodge & Olcott, Inc., Treas.

The guest speaker at this meeting was L. Shelley of Shelley-Marks Co., specialists in antique perfume bottles for the trade. A talk and an exhibition of perfume bottles was of exceptional interest to the meeting.

Owen-Illinois Promotions

Eugene Hildreth, sales manager to the food industries of the glass container division of Owens-Illinois Glass Company has been appointed sales promotion manager succeeding Kenneth C. White. Mr. White's new sales responsibilities will take him to the West Coast.

Sidney Davis, Chicago branch manager, has been selected to succeed Mr. Hildreth as sales manager to the food industries.

E. F. Schafer, Philadelphia branch manager, has been named to the newly created post of general branch manager with headquarters in Toledo. Mr. Schafer is being succeeded in Philadelphia by Wesley Adams.

Johnstone On Board of Merck Ltd.

Henry W. Johnstone, vice president and director of Merck & Co., Inc. has been elected to the board of directors of the Canadian subsidiary, Merck & Co., Ltd. He has been with Merck since 1930 and has been vice president in charge of personnel and plant operations of the company since 1936.

BIMS Golf Results

The final golf tournament of the BIMS of New York took place November 9 at the Plandome Country Club, L. I., where the forerunners of the BIMS met for informal golf several years before the organization was formed eleven years ago.

Prizes presented by Martin F. Schultes, chairman, were awarded to the following: Grand Prize, Louis Bezard, Parfums Schiaparelli; Low gross, Paul Miller, Golden Fleece Corp; Low net, Wallace Nuckols, Swindell Brothers, Inc.; Second low gross, Ralph Stevenson, Givaudan-Delawanna, Inc.; Second low net, Walter Jamieson, Wallace Paper Box Co.; Low net for guests, J. B. Sims, Kimble Glass Co.

Other prize winners were: R. R. Powell, Plexo Preparations, Inc.; Everett Proops, Proops Management, Inc.; Frank Fanning, George Uhe, George Uhe Co.; W. Kyle Sheffield, New England Collapsible Tube Co.; S. L. Mayham, Toilet Goods Association; William Zimmerman, W. F. Zimmerman, Inc.; Fred Webster, van Ameringen-Haebler, Inc.; and John Carpenter, Stanley Sapery Company.

View of the new Rexall Drug Company's building in Los Angeles. Beltbuckle appearance of structure is caused by the incorporation of four patios which provide light for inside offices.

Slater Named Asst. Gen. Sales Manager

Ralph A. Clark, vice president of the J. T. Baker Chemical Co., has announced the promotion of C. H. Slater

C. H. SLATER

to the position of assistant general sales manager. Previous to that he was sales manager, fine chemical division. In addition to his new duties, Mr. Slater will continue to devote a major portion of his time to the management of the fine chemical division.

Northam Warren Sells Air Radio

Northam Warren has sold his entire holdings in Air Radio, Inc., to J. B. Cobrain, former treasurer of the Northam Warren Corporation. Air Radio, Inc., is a company started by Mr. Warren at the outbreak of the war, specializing in the manufacture of radio and radar equipment. During the war years, it became one of the largest suppliers of radar equipment to the Navy.

ADMA Names Convention Committee

Robert B. Magnus, Mangus, Mabee & Reynard, has been named chairman of the entertainment committee for the 1948 annual meeting of the American Drug Manufacturers Association. The meeting is to be held June 7 to 10 at the Mount Washington Hotel, Bretton Woods, N. H. Members of the committee serving with Mr. Magnus are: M. N. DeNoylles, Chas. Pfizer & Co., vice-chairman; A. A. Wasserscheid, Mallinckrodt Chemical Works, honorary chairman; W. D. Barry, Mallinckrodt Chemical Works; Herman J. Dietel and Gerald S. Furman, Merck & Co.; Joseph A. Huisking, Fritzsche Brothers; R. P. Neptun and S. B. Penick Jr., S. B. Penick & Co.; F. J. Reid, New York Quinine & Chemical Works; J. P. Remensnyder, Heyden Chemical Corporation; Clayton S. Shoemaker, the Dow Chemical Company; Charles P. Walker Jr., Citro Chemical Company; Victor E. Williams, Monsanto Chemical Company.

Smith-Dorsey Research Grant

A research grant for the study of rutin has been made to the University of Nebraska by the Smith-Dorsey Company, according to a statement by the company's director of pharmaceutical research, Dr. F. S. Bukey. The work will be under the direction of Dr. Harry Miller, director of the University's chemurgy project, a division of the College of Agriculture.

Pat Henning Joins Central Pharm. Co.

F. L. (Pat) Henning has joined the Central Pharmacal Co., as vice president in charge of West Coast sales. Mr. Henning was formerly executive vice president and general manager of the Nion Company of Los Angeles.

This latest appointment to the staff of the Central Pharmaceutical marks another step in the company's current expansion program. The company will shortly open an office and warehouse in Los Angeles.

Jensen Named to Research Job

Dr. F. S. Bukey, head of the research department of the Smith-Dorsey Company, has announced the addition of Howard P. Jensen to the research staff.

Mr. Jensen will devote his full time to work on organic compounds. He is a

HOWARD P. JENSEN

graduate of the University of Nebraska, College of Pharmacy, and served four years in the Navy.

Mr. Jensen was awarded the Lehn and Fink medal for the highest four-year average in his graduating pharmacy class and also received the American Pharmaceutical Association Fellowship for graduate work.

Halfpenny in Advertising Post

Appointment of Arthur G. Halfpenny as general advertising manager of Northam Warren Corporation has been announced.

ARTHUR G. HALFPENNY

Associated with Northam Warren for seven years, Mr. Halfpenny was at the time of his appointment, assistant to Northam Warren Jr., general manager of the Corporation. Previously he had served in both sales and advertising divisions.

Prior to his association with Northam Warren, Mr. Halfpenny, was, for thirteen years, with Ritchie and Janvier, cosmetic and drug sales representatives.

Burroughs, Wellcome Moves

Movement of the offices of the Distribution and Finance Divisions of Burroughs Wellcome from New York to Tuckahoe, where the Production and Research Divisions has long been located, has been completed, according to Wm. N. Creasy, president of the company. The move to Tuckahoe was decided upon in order to "simplify routine business procedures." It is anticipated better service and closer inter-departmental teamwork will result. The New York offices will only utilize one floor of the Burroughs Wellcome buildings on 41st St. President Creasy will be located in New York.

Scientist Honored

Firmenich & Co., celebrated the sixtieth birthday of their scientific collaborator, Professor L. Ruzicka, winner of the Nobel Prize for chemistry in 1939.

The scientist was presented with a hitherto unpublished scientific works printed in his honor, by Dr. Hartmann, managing director of Ciba, on behalf of the Swiss Chemical Society. The event took place on August 29 at the Hotel des Bergues, Geneva.

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

October ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1947

U.S.I. Exhibits In West Coast Show

The exhibit of U. S. Industrial Chemicals, Inc. for the Pacific Chemical Exposition, held on Oct. 21-25 in the Civic Auditorium in San Francisco, features a wide range of U.S.I. chemicals, including industrial alcohols, solvents and synthetic and natural resins. On a six-foot center panel of the firm's exhibit at Booth 64, a map of the United States in color shows the various production points, sales offices, and warehouse locations of U.S.I., all of which are illuminated by flashing lights. Samples of U.S.I.'s major products are displayed and are available for inspection.

Methionine Nomenclature Altered by ACS Committee

The amino acid *dl*-methionine will hereafter be written DL-methionine in accordance with a new naming system adopted recently by the Nomenclature Committee of the American Chemical Society.

The alteration in methionine notation is an application of the new ACS rule which states that "the optically inactive mixture or racemic compound of the stereoisomers is designated by the prefix DL- in small capital letters." The report continues, "Although the use of small capital letters is desirable in printed material mainly for esthetic reasons, typewritten material will of necessity employ ordinary capital letters. In a manuscript prepared for a printer, a double underlined DL- indicates that the symbol is to be set with small capital letters."

Methionine, one of the ten amino acids considered essential for the growth and repair of animal tissue, is in increasing demand for pharmaceuticals and feedstuffs. It is now employed widely in the treatment of liver damage and the fortification of oral and intravenous protein hydrolysates. Recent papers indicate that it may also be used in the therapies for arteriosclerosis, anemia, and benzene poisoning. To meet heavy requirements for this vital amino acid, U.S.I. is continuing to accelerate its production schedules.

Pure Lubricant Additives Made With Aid of Alcohol

Barium salts of alkylphenol sulfides can now be prepared pure enough to be used in the manufacture of heavy-duty, anti-sludge, anti-corrosion lubricating oils, according to a patent issued recently. Outstanding feature of the process is the use of barium sulfide in place of the customary barium oxide or barium hydroxide. Specifically, 2,4-dibutyl-, or -diamyl-, or 4-octyl-phenol monosulfide is heated in alcohol with an amount of barium sulfide sufficient for neutralization. After evolution of hydrogen sulfide has ceased, the solvent is evaporated.

Swing To Tung Oil Varnishes Foreseen In Paint Industry

Trend Spurred By Current Availability of Tung Oil — Price Is Now Lower Than Linseed or Dehydrated Castor

The American paint industry is now expanding its production of oleo-resinous varnishes and vehicles for use in surface coatings, according to a reputable source. This trend is due largely to the free availability of tung oil (China wood oil) after a lapse of many years, at a current price much lower than either linseed or dehydrated castor oil — the only two oils now on the market which can be favorably compared with tung oil. For many purposes, however, both these oils are considerably inferior to tung in performance. Fish oil and soya-bean oil, at the moment, are lower in price than tung oil, but are not generally regarded as belonging in the same class as tung. Soya-bean oil, by itself, for example, is not usable as a varnish oil, and fish oil has definite color and drying limitations.

Tung Oil Techniques 'Rediscovered'

Despite the fact that tung oil has been freely available for many months—frequently at attractive price levels as compared to other oils—the paint industry has been slow in returning to any major use of this material. There are many reasons for this. The processing of tung oil, for example, is not easy and has, in many instances, almost become a "lost art." Tung oil has the unique property of changing from a liquid oil to a solid gel within a matter of minutes at elevated temperatures, and unless suitable precautions are taken in the processing or cooking of a varnish employing tung, a gelled or spoiled batch is likely to result. If extreme caution is taken to prevent this by under-cooking the oil, then a condition described as lack of "gas proofness" occurs. This condition results when tung oil is under-cooked, and the varnish will dry with a hazy, frosted or "alligator" effect, instead of to a clear, uniform film.

During World War II and most of the previous Sino-Japanese War, tung oil was entirely unavailable for civilian use. Varnish chemists who have been in the industry for less than ten years have had little occasion

MORE

U.S.I. Announcement on Fischer-Tropsch Chemicals Meets Favorable Reception

The announcement made by U. S. Industrial Chemicals in September concerning the signing of a long-term contract between the company and Stanolind Oil & Gas Company for the sale of all water-soluble oxygenated chemicals produced from the first two Fischer-Tropsch plants has met with a highly favorable reception. The large quantities of alcohols, ketones, acids, aldehydes, and esters made available by this process will benefit all industry—and members of the coatings, pharmaceutical, and related fields went on record last month in commendation of U.S.I.'s newest activity. Approximately 300,000,000 pounds of chemicals are expected to be marketed annually from this new synthetic source.

Tropical Butter

Butter which melts at 105 degrees Fahrenheit and keeps for long periods without refrigeration is one of the newest developments in the food industry. Spreadable as conventional butter at room temperatures, it contains diacetyl, hydrogenated peanut oil, skim milk powder, and other products. Secret behind it is a special process carried out in stainless steel equipment.

Once again pure phenolics, such as U.S.I.'s Arofene 700 (heat reactive) and Arofene 775 (non-heat reactive) are being utilized with tung oil in the preparation of highest quality spar varnishes.

ADVERTISEMENT—*This entire page is a paid advertisement*

October ★ **U.S.I. CHEMICAL NEWS** ★ 1947

New Trade Mark Law Trouble You? Read This

A pamphlet is now available from a national association explaining the new Federal Trade Mark Law now in effect. The primary purpose of the pamphlet is to point out some important aspects of the new law and to call attention to some pertinent principles applying to selection and protection of trade marks.

CONTINUED

Swing To Tung Oil Varnishes

to utilize it in formulations. Many are unfamiliar with the procedures necessary for proper handling of this unique oil. As these techniques are again being discovered, the use by the industry of this favorable raw material is being increased.

Special Resins Unnecessary

The fact that phthalic anhydride and, therefore, alkyd resins, promise to continue on the scarce list for many months to come, is an additional factor accelerating the return to hard resin-tung oil varnish formulations. During the scarcity of alkyd resins and tung oil, it was necessary to use linseed or dehydrated castor as the best oils for the production of varnishes or paint vehicles. Both of these oils are relatively slow in bodying and drying properties and produce relatively soft films. It was, therefore, necessary to fortify these oils with specially developed modified phenolic resins of the Arochem 365 or 335 types to secure reasonable drying speed, hardness, and chemical resistance. Modified non-phenolic types such as Arochem 603 and 607 were also developed to furnish similar drying speed and hardness, but superior color properties.

With the return of tung oil as a major factor in varnish formulation, it is no longer necessary to depend upon these special resins to furnish desirable characteristics, since tung oil, in itself, imparts the desired fast bodying, fast drying, and high resistance properties. It is desirable, if not necessary, to use less reactive types of resins than those mentioned above to assist in controlling the extremely rapid bodying of tung oil.

Modified phenolic resins of the Arochem 90, 95 and 115 types, which were used with tung oil in large amounts before the war, are again being used in large volume for this purpose. Also pure phenolics, such as Arofene 700 (heat reactive) and Arofene 775 (non-heat reactive), are again being widely utilized with tung oil in the preparation of highest quality spar varnishes and chemical resistant finishes.

Certain ester gums, such as U.S.I. Ester Gum "B," or polymerized variants, such as Arochem 345 or 349, also provide superior drying, bodying, and resistance qualities when formulated with tung oil.

Pasteurization Test Can Now Be Used On Almost Every Dairy Product

A modified phosphatase test, originally developed and perfected for use on cheddar cheese to determine whether the milk used in making the cheese had been pasteurized or not, has now been developed so that it can be applied to practically all dairy products, according to a government bulletin.

The improved test depends on the fact that all raw milk contains a phosphatase enzyme, and that this enzyme is destroyed by heating at a temperature a few degrees higher than that required to destroy the most resistant of the pathogenic or disease-producing organisms that may occur in milk. The test provides an accurate, quantitative measure of the phosphatase activity in milk or in products made from it. It is consequently a reliable index of the adequacy of pasteurization.

With the improved test, it is possible to detect a decrease of as little as a single degree Fahrenheit in the pasteurizing temperature, government scientists claim. The test is stated to be so sensitive that it will detect, for example, the presence of one pound of raw milk in 2,000 pounds of properly pasteurized milk, whether the test is applied to the milk or to products made from it. Since the enzyme is more concentrated in cream, the test is said to be capable of detecting one pound of raw cream in 5,000 pounds of pasteurized cream.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

To keep lard, oils, and fats fresh, a new antioxidant has been approved by the United States Department of Agriculture and the Food and Drug Administration in quantities up to 1/100th of 1 per cent. **(No. 245)**

USI

A new-type respirator, said to be the first of its kind, is claimed to incorporate a revolutionary dust filter for protecting industrial workers exposed to poisonous and disease-producing dusts smaller in diameter than 24 millionths of an inch. **(No. 246)**

USI

An all-purpose grease to replace the five now used for automobile lubrication has been announced. The grease, which is alleged to resist high-temperatures, severe working conditions, and water, will apparently fill all lubrication requirements. **(No. 247)**

USI

To extend carnauba wax-water emulsions is the purpose of a new compound which may be used to replace up to 40 per cent of wax solvents as well as the gums and resins now used as extenders. **(No. 248)**

USI

A new permanent ink that sticks to glass is reported to be non-corrosive, non-poisonous, and non-flammable. It is also said to be useful on marble, china, porcelain or ceramics. **(No. 249)**

USI

A new-type detergent and wetting agent, suitable for use in the textile, tanning, dairy, pulp, paper, and laundry industries, is now available in ready-to-use aqueous solutions or in flakes. **(No. 250)**

USI

An oil-resistant compound for splicing electric wires is recommended by the manufacturer for use on any electrical circuit coming in contact with oil. **(No. 251)**

USI

To extend paints, two new types of soft, decomposed silica are now being offered which may also be used as abrasives for polishes and as fillers in the manufacture of rubber. **(No. 252)**

USI

A flame-resistant acetate molding plastic has been announced. The manufacturer states it is available in quantity in a number of colors including maroon, black, red and tan. **(No. 253)**

USI

To protect highly polished metals during fabrication and manufacturing operations, a new strippable protective coating is offered which is said to resist chemical agents and corrosion. **(No. 254)**

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Fusel Oil—Refined

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Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96% Absolute
*Super Pyro Anti-freeze
*Solox proprietary Solvent

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ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS
Dibutyl Oxalate
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PHTHALIC ESTERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
*Diatol
Diethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chloranilide
Alpha-acetylbutyrolactone
5-Chloro-2-pentanone
5-Diethylamino-2-pentanone
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Alpha-Oxalpropionate
Ethyl Sodium-Oxalacetate
Methyl Cyclopropyl Ketone

ETHERS
Ethyl Ether
Ethyl Ether Absolute—A.C.S.

FEED CONCENTRATES
Riboflavin Concentrates
*Vacatone 40
*Curbay B-G *Curbay Special Liquid

ACETONE
Chemically Pure

RESINS
Ester Gums—all types
Congo Gums—raw, fused & esterified
*Araplaz—alkyds and allied materials
*Arofene—pure phenolics
*Arochem—modified types
Natural Resins—all standard grades

OTHER PRODUCTS
Collodions
Ethylene
Ethylene Glycol
Urethan
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DL-Methionine

Printed in U.S.A.

Canaday Predicts Bright Outlook For Cosmetics

Expressing optimism on the outlook for the perfume and cosmetic industry for the balance of this year, W. D.

W. D. CANADAY

Canaday, vice president in charge of sales and advertising for Lentheric, Inc., is on a coast-to-coast tour of major markets in the country.

He announced that a large-scale promotion is planned for the company's Christmas gift presentations "which are the most attractive we have ever offered." Lentheric has substantially strengthened its production, research, design and merchandising operations during the year. And the company has re-established its markets in over 54 countries of the world.

Thomas Leaves Pedlar & Ryan

Harold B. Thomas has resigned from his position with the advertising firm of Pedlar & Ryan to return to the drug business, with which he has long been identified. He is joining A. Richard Diebold in the acquisition and development of drug products.

Sellmer Made Sales Mgr.

Barlow-Maney Laboratories, Inc., Cedar Rapids, has appointed Edward R. Sellmer as sales manager.

A graduate of the University of Iowa with a B.S. degree in Pharmacy, Mr. Sellmer spent eight years as a special representative for a well-known pharmaceutical house. In 1943 he joined the Navy with the rank of Lieutenant, j.g. and was discharged in 1946 as a Lieutenant Commander.

Roberts Named Plant Manager For Glyco

William H. Roberts, Jr., formerly manager of penicillin and streptomycin production for E. R. Squibb & Sons, has been named general plant manager of the Natrium, W. Va., plant of Glyco Products Company, Inc., which was leased from the Government last winter.

Holder of Master degrees in chemical engineering from M.I.T. and business administration from Harvard, Mr. Roberts was first associated with Calco Chemical Division of American Cyanamid Company, and for seven years was senior project manager of plant design and construction for the Hooker Electrochemical Company. For some time he was a resident engineer for this firm acting as consultant in the design, construction and operation of the $15,000,000 chlorine and caustic soda plant at Las Vegas, Nevada, one of the largest in the world.

Son Born to Alexanders

Paul Alexander, advertising representative for Drug & Cosmetic Industry became the father of an eight pound boy, William Warner Alexander on October 7.

Larrick Addresses Drug Assn.

George P. Larrick, assistant commissioner of Food and Drugs of the FDA, was guest speaker of the Parenteral Drug Association at its dinner October 10 in the Hotel New Yorker.

He discussed "Enforcement of the Federal Food, Drug and Cosmetic Act" as it effects the Parenteral Drug Industry.

S.K.F. Labs. Names Moore

Smith, Kline & French Laboratories, has appointed Maurice L. Moore, Ph.D., as director of research laboratories, succeeding the late Dr. Walter G. Karr.

DR. MAURICE L. MOORE

Dr. Moore joins SKF from Frederick Stearns & Company, where he was assistant director of research.

Since 1934, Dr. Moore has made several important discoveries in the sulfonamide field. He graduated from the University of Florida in 1930 and received his Ph.D. in 1934 from Northwestern University.

Djer-Kiss Names Bland

V. Vivaudou, Inc., manufacturers of Djer-Kiss and Mavis cosmetics, have appointed the Lee C. Bland Corporation as representative.

DCAT gold trophy awarded to Charles H. Slater (center), J. T. Baker Chemical Co., by Fred J. Stock (right), Chas. Pfizer & Co. Harold C. Green, L. Sonneborn Sons, Inc., golf chairman, looks on.

Oxzyn

SERVES THE TRADE EXCLUSIVELY

WITH QUALITY

LIPSTICKS

CREAM ROUGES

EYEBROW PENCILS

CREAMS

COMPACTS | ROUGE | POWDER | MAKEUP

EYE SHADOWS

WATERPROOF MASCARAS

FACE POWDERS

WE ALSO MANUFACTURE POWDER PUFFS, VANITY PUFFS, LOOSE SIFTER POWDER DEVICES AND SPECIAL LAMSDOWNE PUFFS

PRODUCTS MADE IN CONFORMITY WITH THE PURE FOOD, DRUG AND COSMETIC ACT
PRODUCTS LIABILITY INSURANCE CARRIED

OXZYN COMPANY

NEW JERSEY OFFICE
ONE PLEASANT AVENUE
CLIFTON

MANUFACTURING
Cosmetics of Quality
SINCE 1877

CANADIAN OFFICE
54 OSLER AVENUE
WEST TORONTO, ONTARIO

Whitehall Elects Four VP's

Four newly named officers of Whitehall Pharmacal Company have been announced; Richard G. Rettig, vice-president in charge of advertising; E. L. Bernegger, vice president in charge of retail and wholesale sales; Ira D. Joel, vice president in charge of chain store sales and Dr. Robert P. Herwick, vice president in charge of medical research, control and development.

Pfizer Acquires Citro Chemical Co.

Negotiations have been completed by Chas. Pfizer & Co., Inc., with Emerson Drug Company for the acquisition of Citro Chemical Company, an Emerson subsidiary.

Citro was established in 1903, as a manufacturer of acetanilid. Charles P. Walker, Jr., president of Citro and his present staff will continue to operate the company as a separate unit.

Hasslauer Elected Director

Victor Hasslauer of Paris has been elected a director of Gerard J. Danco, Inc. Mr. Hasslauer is considered one of the greatest experts on musk, civet and ambergris and considered the dean of the essential oil industry in Paris.

Polak & Schwarz's Postwar Conference

The director and officers of Polak & Schwarz all over the world assembled in Zaandam, Holland in September for the company's first postwar conference.

The Holland headquarters of the organization had, of course been isolated during the war and it was thought necessary to call the officers with a view to discussing the circumstances resulting from the war.

The main object of the conference was to effect the necessary decisions raising the efficiency of the organization to and beyond its prewar level. The members attending the meeting felt that this was achieved.

New Children's Medicine

Children's Aide Brand, a new line of pleasant tasting medicine for children, is now being placed on the market by Medicine For Children, Inc., San Francisco. It will be sold only through drug stores.

Officers of the firm include Howard Lubarsky, president; and Seymour Groner, vice president and director of research.

Brown Passes Quarter Century

David R. Brown has rounded out 25 years of service with Merck & Co., Inc., Rahway, N. J. He is supervisor of cosmetic materials in the medicinal

D. R. BROWN

sales department, and has been inducted in the Merck Quarter Century Club and presented with a service and gold watch.

Daughter of Luis de Hoyos Wed

Mr. and Mrs. Luis de Hoyos have announced the marriage of their daughter Rose Marie to Frederick Anthony Dormer. Mr. de Hoyos is the president of Synfleur Scientific Laboratories, Inc., and for twelve years served as Mayor of Monticello, N. Y.

Warning on Bruno Court Products

M. E. Bouge, general manager of Bruno Court, Grasse, France has heard products of his company have been offered to American consumers through channels other than Naugatuck Aromatics. He states that Naugatuck Aromatics Division of United States Rubber Company, New York, with its branches in Chicago and Los Angeles are the sole distributors in the U. S., and Canada, and anyone else offering Bruno Court products do so without Bruno Court's knowledge and permission.

Dedricks Take Golf Honors

Alec J. Dedrick, vice president of van Ameringen-Haebler, Inc., with Mrs. Dedrick won first low net prize in the Westchester County Golf Association's Husband and Wife Tournament September 19. At the Leeweed Country Club the Dedricks finished the alternate shot match with an 84 minus 13, net 71 score.

Forms Chemical Sales Co.

William M. Stieh, former president of Metalsalts Corp., has organized a new chemical sales group, William M. Stieh & Co., with temporary offices at 20 Vesey St., N. Y.

Until recently Mr. Stieh was president and director of the Metalsalts Corp., Darsyn Laboratories, Metalorganics, and American Mercurials. Prior to his founding these companies he was vice president and director of F. W. Berk & Co.

J. S. Stokes

J. Stogdell Stokes, died September 26 of pneumonia at the Abington Memorial Hospital. He was seventy-seven years old.

Mr. Stokes established the firm of Stokes and Smith, which under his direction became a leader in the manufacture of paper box and packaging machinery. He was also president of Durite Plastics and vice president of the Yarnall-Waring Co., makers of engineering specialties.

James Burns

James Burns, president of Pharmaceutical Organics, Inc., New York, and a founder of the International Vitamin Corporation and the U. S. Vitamin Corporation, died September 23 of heart disease at his home in New York. He was fifty-three years old.

Paul Mayer

Paul M. E. Myer, president of Mem Company, died at the age of sixty-three in Geneva, where he had been on a business trip inspecting the Mem soap factory and two retail stores in Vienna.

Mr. Mayer was a native of Vienna, where the Mem Company was formed in 1852 by his grandfather. He joined the organization in 1912 and came to this country in 1940.

Dr. Veador Leonard

Dr. Veador Leonard, discoverer of the antiseptic, hexylresorcinol, died September 11, at the Johns Hopkins Hospital, after an illness of three weeks. He was 59 years old.

Dr. Leonard was well known for his discovery of hexylresorcinol, developed by him in 1925 while he was working in the Johns Hopkins School. At that time it was made known that the scientist recognized the need for the new drug to replace carbolic acid which he had seen used during his service during the first World War.

Born in Wahpeton, N. D., Dr. Leonard received a degree from Yale in 1907 and his M.D. from Johns Hopkins medical school in 1911. He is survived by his wife.

Now available
for the drug and cosmetic industries

COMPOUND G-4

$C_{13}H_{10}Cl_2O_2$ **BACTERICIDE AND FUNGICIDE** MOLECULAR WEIGHT 269

Nomenclature: bis (5-chloro-2-hydroxyphenyl) methane; Dihydroxydichlorodiphenylmethane.

Melting point: 172 to 175° C.

Color: White to slightly pink.

Odor: Faintly phenolic.

Bactericidal properties:

F. D. A. phenol coefficient 90 at 37.5° C. against Staphylococcus aureus.

F. D. A. phenol coefficient 110 at 20.0° C. against Eberthella typhosa.

A. O. A. C. phenol coefficient 50 at 20.0° C. against Trichophyton interdigitale.

Solubility: Soluble in alcohols, ketones, propylene glycol, vegetable oils, fixed alkalies. Insoluble in water.

Toxicity: Non-toxic and non-irritating.

Suggested uses: Compound G-4 can be used as the active ingredient in athlete's foot preparations, including powders, lotions and ointments, and in veterinary remedies for the treatment of ringworm infections; it can be utilized as a topical antiseptic for superficial wounds and in such cosmetic products as deodorant colognes and powders; and as a fungicide, it will prevent mold growth and act as a preservative in hair wave sets, lotions, cold creams, ointments and many other cosmetics.

"BUY WISELY—BUY GIVAUDAN"

Givaudan-Delawanna INC.

Industrial Products Division · 330 West 42nd Street, New York 18, N. Y.

The Sophisticated Package

Lustrously black jars, ceramically transformed out of standard flint jars by our Glass-Crafters shop! The jet black is permanently fired-in and is really swank! Available **from stock** in 1, 2, 4, 8, and 16 oz.

another "SHOPPER STOPPER" *by Braun*

W. BRAUN CO.
Glass Containers and Closures
304 N. CANAL ST. • CHICAGO 6, ILL.
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THE ADDED TOUCH
in Decals

A delicate filmy handkerchief, with the haunting scent of her distinctive perfume. . . . That's an added touch that can endear a woman to a man.

For the added touch that will lend distinction to your cosmetic package, use delicately beautiful PALM FECHTELER *ENGRADEL* DECALS. Sturdy and long lasting, they blend with and add to the beauty of any packa Samples and estimates on request.

P.F. DECALS *Dept. DS*

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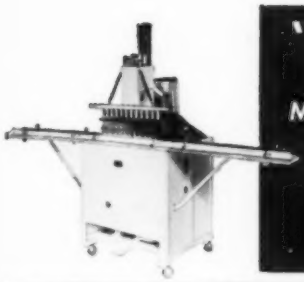


"ESA"

MULTIPLE SPOUT

VACUUM BOTTLE FILLER

EASILY ADJUSTED NO DRIP SPOUTS

ALLOWS OPERATOR USE OF BOTH HANDS

TOTALLY ENCLOSED MOTOR UNITS

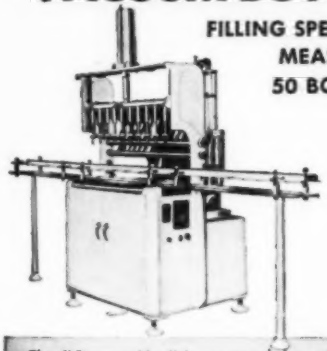
The Ertel ESA, in the low price field, is especially designed for filling small bottles—speed 50 to 80 per minute. Constructed from cast sections for sturdiness and durability, the ESA can be an integral part of any modern production line.

TWO *Quality* VACUUM BOTTLE FILLERS

FULLY DESCRIBED IN CATALOG-15 SENT ON REQUEST

"Pneumo-Vac" VACUUM BOTTLE FILLER

FILLING SPEED MEASURED IN QUARTS—50 BOTTLES PER MINUTE



ERTEL LIQUID HANDLING EQUIPMENT

The "Pneumo-Vac" is operated by a balanced foot valve which allows the operator full use of both hands and reduces physical effort to a minimum. Drippage is positively prevented while unit is in operation. Liquid filling heights, for 3" to 13" bottles, can be quickly regulated. Illustrated "Pneumo-Vac" bulletin gives full information. Write for your copy.

ERTEL ENGINEERING CORPORATION

KINGSTON NEW YORK

NEW YORK CITY SALES OFFICE AND SHOWROOM
40 WEST 48th STREET, NEW YORK 19, N. Y.

U. S. ROTARY VACUUM FILLERS

Fully Automatic

In Five Machine Sizes.

Capacities up to 300 per Minute

Handle Ounces to Gallons.

Where the highest type of filling performance is required, this machine stands supreme. It is unapproached for efficiency and hairline accuracy—and fills so clean that, when desired, labelling may be done before filling! Handles any liquids or semi-liquids. Available with 15, 16, 22, 30 and 33 filling tubes for specific filling operations.

Notable advancements are described in the new edition of the free "Bottling Engineer Handbook." Write also for "Rotary Filler Details."

OTHER U. S. FILLING UNITS: The popular new Semi-Automatic Model B-2 Vacuum Filler available with interchangeable filling stems for handling AGST or ordinary neck opening containers up to 4" diameter. A rapid filler for most any type liquid or semi-liquid. Invaluable to small plants; an essential "stand-by" for large plants. Portable. Write for bulletin.

U. S. BOTTLERS *Machinery Co.*

4013 NORTH ROCKWELL STREET
CHICAGO 18, ILLINOIS

MANUFACTURERS OF

PUMPS
CAPPERS
FILTERS
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WASHERS & DRYERS
WASHERS
CORKERS
FILLERS

STOKES
TABLET MACHINES

FOR
SMALL SCALE OPERATION
OR
EXPERIMENTAL TABLETTING

Eureka single-punch bench model Tablet Machine

or

"BB-2" Rotary Tablet Machine

HIGH SPEED
QUANTITY PRODUCTION
UP TO 1500 TABLETS
PER MINUTE

Whatever your tabletting needs — whether for small production or experimental and research work, or for high speed, large scale production — there is a Stokes Tablet Machine to meet them.

For over 50 years Stokes has designed and built machines for compressing pharmaceutical and other tablets — machines which, today, are standard equipment throughout the world.

These machines embody many unique features. Typical are the Automatic Excess Pressure Release on rotary and larger single-punch models; Anti-Capping Devices; and means of producing ball-shaped and perforated tablets.

Write for Catalog No. 480-T describing Stokes Tablet Machines, auxiliary equipment, and technical and laboratory facilities available.

F. J. STOKES MACHINE COMPANY
5932 Tabor Road, Philadelphia 20, Pa.

F.J.Stokes **TABLET MACHINES**
PHARMACEUTICAL EQUIPMENT
FJS Est. 1895

Production Forum

By Francis Chilson
Industrial Consultant

Alas Poor Yorick!

Last month I related to you how I found a skull in the burial yard of the Temple Court Church in London. I didn't know when I found the skull, or even when I wrote the article that I had stumbled on the skull of one of England's most famous knights—Geoffrey de Mandeville, the first Earl of Essex. The next day, after finding the skull I had lunch with my good friends T. R. G. Bennett, head of the Wellcome Foundation, and his right-hand men, Dr. Dennis Wheeler, and Barclay Inglis. When I related my experience of the night previous, the story was received with impolite skepticism. Bennett bluntly said I must have been drunk. Wheeler said it sounded to him like skull-duggery. And Inglis accused me of being a "bloody ghoul." I offered to bet five dollars all round if they would accompany me back to the churchyard the skull would still be there. No one would take the bet so that afternoon I went back myself and discovered that the skull *was still there*. Subsequently I went off to Paris and Switzerland and then back to the States. About a week after my return I received a letter from Dennis Wheeler, enclosing the following clipping from the London Daily Telegraph He said he knew I was up to skull-duggery and accused me of having pinched the skull anyway. I have no scruples about admitting that if I had known whose skull I held in my hand, I would have swiped it. But the fact is, I didn't. Dammit.

The following is a Clipping From the "DAILY TELEGRAPH" LONDON, ENGLAND August 28, 1947.

"Middle Temple lawyers, after further researches yesterday into the rifling of coffins in the Church of the Knights Templars in the Middle Temple, discovered that the skull of the first Earl of Essex was missing from its casket.

"The casket, made from tulip wood grown in the Temple Gardens, was found smashed on the floor of the vaults. Four coffins were found to have been opened in the vaults. No other relics were found to be missing, but the riflers had scattered the skeletons on the stone floor.

"Last night, with police on guard, the last bricks sealing the two entrances to the vaults were put in place. The skeletons of the knights had been restored to their coffins.

"Rifling of the vaults occurred during the week-end, when entrance was made through an outside grave having an aperture 18 in. wide by 3 ft. in length and a sliding drop of 9 ft. into the vault, which extends outside the east end of the church.

"Officials of the Middle Temple have three theories about the desecration:
That the thief is a 'cranky collector;'
That he was someone under the impression that jewels had been buried with the Knights Templars;
That the disturbance was made by mischievous youths.

"Whoever made the entry must have used some form of artificial light. The skull taken is of considerable interest to anthropologists. The Earl began his career as Geoffrey de Mandeville. He was fatally wounded in the head while marching in rebellion against King Stephen in 1144.

"He died excommunicate for his desecration and plunder of church property, and his corpse was carried by some Templars to the Old Temple in Holborn, where it remained unburied for nearly 20 years.

"In 1163, his son having made restitution, the Pope granted absolution, and the Earl's remains were buried in the porch of the New Temple. During this century his skull was unearthed and removed to the Middle Temple Library, where it remained for some years until it was placed, in 1930, in the vaults."

Future Sales Potential

The recession in the drug industry during the first half of this year has apparently frightened a good many of manufacturers. Their fright has been manifested by curtailing or abandoning expansion plans, by suspending modernization and construction programs. In some quarters there is apparently some fear that the drug

industry reached its maximum volume before the war. When the war ended, many manufacturers felt there would be an immediate slump, part way back at least to pre-war levels. Many manufacturers felt that the piled up war surpluses in government warehouse would cause a recession until these supplies had been consumed. These fears seem to have been without foundation. 1946 was probably the biggest year in the history of the industry and 1947 will probably match it. Although there are some firms which were badly hit by the recession of the first and second quarters, there are others who are well ahead of last year.

Let's have a look ahead at the next fifty years. I maintain that every company director should take a fifty year view. After all, fifty years is not a great time in the life of a successful company. Schieffelin and Company is one hundred and fifty years old and still going strong. William S. Merrill and the Tilden Company are well over a hundred years old and are still in there pitching. Sharp and Dohme, Abbott, Parke Davis, Lilly and a lot of the other big outfits are over fifty years old and are still growing.

When you build a new plant, the life of the building is fifty years and it is reasonable to assay the factors which provide for normal growth over such a period of time. What are the factors which lead to the belief that the drug industry will probably quadruple its present volume in the next fifty years? First, government hospitals are jammed full of veterans, and civilians, taking advantage of group medicine plans, are crowding civilian hospitals. After the last war the industry did a large volume of business with the Veterans Administration even though it was done at a relatively short profit. Hundreds of thousands of veterans from World War I are still receiving medical treatment and their number has been increased by still more hundreds of thousands from the recent war.

A great variety of insurance plans are causing increasing numbers of people to take extensive medical treatment simply because it is becoming relatively inexpensive to individuals.

Next, we have an aging population. At the Shawnee meeting of the DCAT Ivor Griffith pointed out that whereas the span of life in 1900, according to the insurance tables was forty-five years, it is now sixty-three, and by 1980 it is expected to be seventy-five. As Ivor pointed out, old people need more medical attention than young ones so that as the population ages, the consumption of medicines of all kinds will increase.

This consumption will be accentuated by the fact from now on increasing numbers of people over sixty-five will be on pensions from private sources. When men and women live on pensions, they have little to occupy their minds excepting their ailments and are more apt to see their doctors than they would if they were still punching time clocks.

The increase in industrial medicine is phenomenal. A great many companies are not only providing complete medical care for their employees, but also are extending that care to their employees' families. This is more pronounced abroad than it is here, but the trend is definitely that way.

A very substantial percentage of our populating, probably as much as 20%—especially among the extremely poor classes such as the hillbillies, the negroes and the slum population—have never received reasonably adequate medical care. They are still not receiving it. That they will receive it through some form of socialized medicine, there can be no doubt. We can no longer afford to have such a large part of our population without reasonable medical care.

Next, there is the normal population growth which, since the termination of the war, has had a sharp upward swing, and according to statisticians this upward swing will continue probably for fifteen years. It is expected in some quarters that the population of this country will reach 180,000,000 people within thirty years.

There undoubtedly will be a tremendous increase in foreign business. The nations of the world are industrializing which, as it increases their standard of living, will increase their demand for medical care. Industrialization in new countries always takes the form of the establishment of heavy industries. These backward countries will first try to establish their own building material and textile industries before they get around to the lighter industries such as the drug and cosmetic industry. Therefore, it probably will be a century before these backward nations all have self-sufficient drug and cosmetic industries. In the meantime, at the rate American plants are being established abroad, a good part of this foreign business will be in American hands, operating through foreign subsidiaries. Right now the export business of the industry is very high and is increasing. It will continue to increase until the German and German sponsored companies in Switzerland and other countries are able again to fight with their old vigor in the international markets.

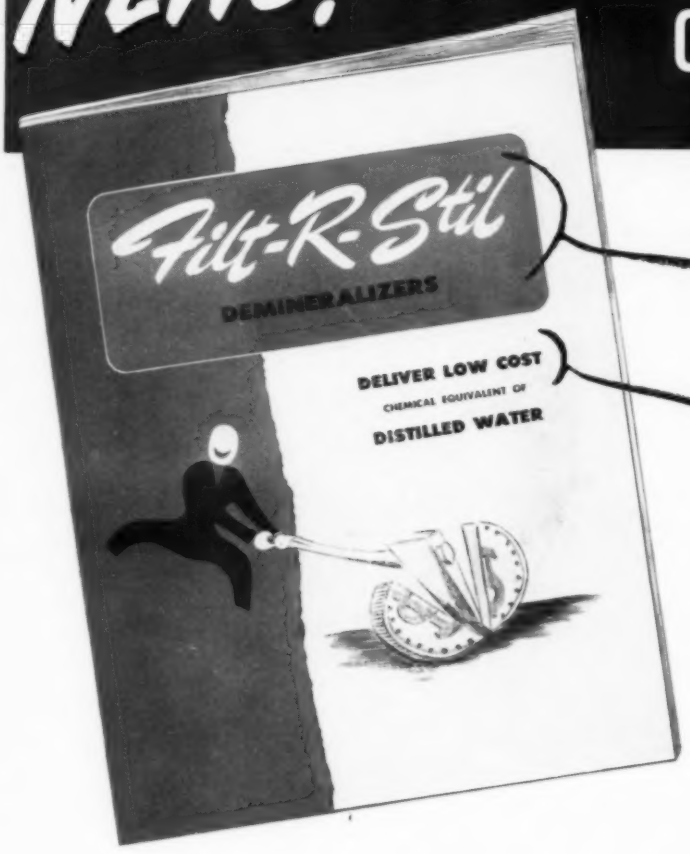
Preventive medicine will continue to increase the total volume of drug business. A good part of our vitamin business is being used for this purpose. Amino acids have been introduced and various other types of special nutritional foods or nutritional supplements will continue to increase this part of the drug volume.

There has been a phenomenal increase in the consumption of veterinary products. As farmers become more educated to the need for preventive medicine in this field, as well as educated to the use of various types of remedies, the volume of veterinary business will continue to increase. Likewise, as people have more leisure time, they will devote more attention to pets. In the last ten years there has been a striking increase in the sale of pet remedies and in the number of dog and cat hospitals. In New York City there is at least one dentist who specializes in animals' teeth. These things are signs of the trend.

Better dental care is increasing the demand for dental products.

Finally, as working hours decrease, free time accidents

NEWS! ... WATER DEMINERALIZERS CUT COSTS



New

Typical example: costs cut from $50 a day to 50¢ a day!

Here's a NEW book describing the most modern and economical way to a readily accessible supply of mineral-free water. Here are some of the questions the book will answer for you:

1. Why is demineralized water so much more economical than distilled water?
2. What other advantages do Cyanamid's FILT-R-STIL* Demineralizing Units offer as compared to distillation?
3. What's in raw water besides H_2O?
4. Why is water processed by a FILT-R-STIL Demineralizer always of uniformly high quality—even though the raw water fluctuates considerably?
5. Why are FILT-R-STIL Demineralizers so easy to operate? What capacities are available? How little space is required?
6. How can operating costs be calculated . . . and savings?
7. What does Cyanamid do to "stay ahead of the parade" in demineralization?

* *Reg. U. S. Pat. Off.*

If your operations call for an economical supply of mineral-free water, you need this new, free book. *Mail coupon for it today!*

AMERICAN CYANAMID COMPANY

American Cyanamid Company D.C.I-5
Ion Exchange Products Dept. 10
30 Rockefeller Plaza, New York 20, N. Y.

Send me your new booklet on FILT-R-STIL Demineralizers. Briefly, my water problem is of the following nature:

_____

_____

_____

Name _____

Company _____

Address _____

City _____ *State* _____

Labeling without glue
sounds fantastic!

But True! No glue to prepare; no continual adding of glue or water; no time-loss for cleaning; but full production every hour of every day. Fifty and more labels per minute applied with *perfect register* by the same dependable vacuum method of label handling that won such wide recognition for precision and low operating cost over a nine year period for the famous Pony Labelrite.

We'll be glad to give you details . . .

NEW JERSEY MACHINE *Corporation*

1550 WILLOW AVE. • HOBOKEN, N. J.
Chicago Office: 325 W. Huron Street
Cincinnati Office: 1701 Carew Tower

Export Division • 44 Whitehall Street • New York City, N. Y.

increase also. Automobile accidents, hunting accidents, fishing accidents, sporting accidents of all sorts.

With all due respect to research, which is being intensified all along the line, it does not appear likely that within the next century anyone will discover a cure-all for all diseases. For a short time it looked as if the widespread use of penicillin might make a hole in the drug business. But the use of penicillin has been concomitant with a steady increase in drug volume. A lot of other new products will be introduced from time to time. The chances are that they too will increase rather than decrease total drug consumption. New revolutionary products like penicillin and streptomycin will surely outmode other products in certain fields and the research obsolescence factor will sharply increase as time goes on.

The manufacturer, in assaying his place in the industry in the long view, must consider his position from two viewpoints: he must, as I have tried to do in the foregoing summary, assay as carefully as possible the potential growth of the entire industry. When he has satisfied himself on that score he then must consider the potential of his own organization in relation to the potential of the industry as a whole.

This is indeed a matter of serious individual concern. During the past fifty years it could be said of the drug industry that once a firm became established in the manufacturing end of the business, that is to say, once it had survived for five years and had reached a volume in excess of a quarter of a million dollars annually, it could be expected to hang on. The majority of firms in the trade have never reached a million dollars in total volume and yet some of them are forty and fifty years old or older.

Time was when research or product development consisted in finding out the latest item in Parke Davis' catalog and then copying it. The day of the "bumper" is past. As research with its concomitant research obsolescence becomes more and more intensified, the chances are that in a few years a good many of the sleepy old firms with whom we have lived peacefully for so many years will no longer be in business.

It seems to me if you are going to stay in the drug business you are going to have to stay on your toes. This does not mean that the odds will be hopelessly weighted against the small manufacturer. On the contrary, the big manufacturers with all their resources, have never and never will be able to commandeer all the brains in the industry, and, moreover it is a historical fact that a small, aggressive manufacturer with a good idea and a good product can step into the arena and carve himself a nice chunk of the total business. Condider the records of Lakeside Laboratories and G. D. Searle and Company. They have done a remarkably fine job in the past ten years. Yet twenty years ago one was not in existence and the other was an obscure little physicians' supply house. Both firms, incidentally, came up by the same route—through research supported by intelligent management and aggressive marketing.

So, brother, if you are going to stay in this great and growing drug business for the next fifty years keep your eyes open, roll up your sleeves and spit in your fists.

Cost Reduction

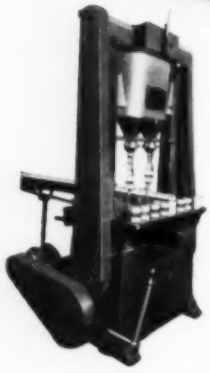
All of us, in every department of every business, are going to have to spend a lot more time devising ways of reducing costs. I don't mean that we should stop spending money. Too often bookkeepers in high places feel that the way to reduce costs is to stop spending money. So blindly they curtail advertising expenses, selling expenses, research expenses; they prevent expenditures for modernization and necessary new plant construction. More often than not, costs can be reduced by spending money constructively. It is a pity, however, that so few men in the upper echelons of management know how to spend money constructively. It takes vision to do that and bookkeeping minded people rarely have any vision.

Cost reduction takes two forms—constructive expenditure or investment of money, and the elimination and prevention of waste. All of us are operating at a much higher cost level than we ever had to contend with before and this state of affairs will undoubtedly continue for a good many years into the future. Twenty years ago we could have built a good factory for $2 or $3. a square foot, while the same factory today would cost us three times as much. This means higher fixed overhead, higher insurance, higher taxes, higher depreciation—higher fixed charges all along the line. We have higher salaries and wages to contend with and higher material costs. Even though by comparison the margins of the drug and cosmetic industry are much wider between cost of doing business and selling price than those of other industries, we also have higher selling distribution and research costs on a smaller volume. We cannot and probably never will be able to speak of our output in tons as many other consumer goods industries do. So it behooves us all to sharpen our wits, our eyes and our pencils.

Many firms in the trade have unwisely blinded themselves by stopping necessary expenditures for modernization and new construction. This was done in many instances in the futile hope that costs for equipment and construction will go down radically in the near future. Undoubtedly there will be some minor reductions but the net saving on such reductions are meaningless. We are confronted now with a situation in which the investment in our business is and will continue to be higher than it has been hitherto. Money is still cheap and the cost of carrying and depreciating an investment is not great by comparison with savings that can be made through wise modernization or new construction.

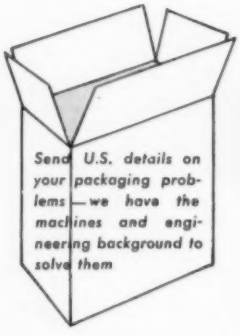
I know of one case where the consolidation of a plant will save a half million dollars a year in payroll, trucking expenses and general overhead. The new construction program which would make this economy possible has been suspended for at least a year. It will take one

. . . they chose US



Model MH "BOND" Semi-Automatic TWIN STATION FILLING MACHINE

The makers of the products illustrated, old-timers in the powder-packing field, chose the Model MH Bond Semi-Automatic Twin Station Filling Machine several years ago. Today they are still enthused with its versatility in handling varying-sized containers and widely different materials, with its speed and accuracy in filling cans, jars, cartons and shallow boxes. It is the ideal machine to volume-fill, gross-weigh or pack talcum powder, face powder and other types of cosmetic powders, as well as dry pharmaceuticals, ground spices, cocoa, flour and other fine powdered materials. What's more, with the MH Bond a single operator can fill up to 40 containers per minute with the closest accuracy. If you package cosmetics, drugs, chemicals, *in fact powders of any kind in any type of container,* it will pay you to get in touch with **US.**



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helluva reduction in construction costs to save the half million dollars which is being wasted by waiting. And the wait of a year defers the advantageous competitive position the company would gain by a new plant with consolidated facilities. In the meantime, sales are being lost through a lack of capacity and inability to give more prompt service.

In another instance, a modernization program is being deferred because it would represent an investment of $200,000.00 and the company hopes there will be a reduction in the cost of equipment and more prompt delivery. In the meantime, the old plant is being operated even though the production and engineering people realize that somewhere between $50,000.00 and $75,000.00 can be knocked off operating costs through the use of proper equipment properly laid out. Since money is so plentiful and so cheap, and since modernization and construction programs can be undertaken without impairment of working capital in the least degree, it seems unwise and foolish to defer expansion programs which are badly needed in the hope that a miracle is going to occur in the next few years.

The addition of a substantial sum to invested capital presents no problem. Throughout the entire industry there always has been between competitive firms a difference in the ratio between invested capital and volume of business done. Some firms still operate old mill type structures which were completely depreciated twenty-five years ago. Other firms operate modern air-conditioned plants that represent an investment much greater than that of old-line competitors. But there has never been a single instance in the history of the industry where a firm operating a fine, modern, well equipped plant ever suffered a competitive disadvantage or ever went broke because it had too much money invested in plant and equipment.

Some of the very firms I am speaking of have had no hesitancy in the past to fritter away vast sums of money in ill-digested advertising campaigns. One in particular, with which I am very familiar has steadily increased its advertising appropriation blindly, even though the ratio of advertising expenditure to sales income has steadily increased. Obviously, something is wrong there. When unwise sales, advertising or research expenditures are made, they reduce profits accordingly. Expenditures made for improved plant and equipment, however, are additions to investment and the increased operating cost entailed by depreciation and interest charges on this investment can always be more than offset by decreases in operatiug cost. Even if the industry goes into a prolonged decline, which is utterly improbable if not impossible in my judgment, a firm with a modernized or new plant will be much better able to endure the vicissitudes of that decline than the firm of firms which are stuck with inadequate, badly equipped plants. There is more need for modernization in times of depression than there is in times of expansion, actually.

In respect to watching costs a lot of plant managers throughout the industry have had a fairly easy time of it during the period of easy money. Many wasteful, slothful practices have crept in and have been tolerated. Plant managements have grown soft. Instead of thinking in terms of pennies they have grown accustomed to thinking in terms of dollars. No matter how well any job is done in any plant, it can still be done better if enough attention is given to it. Plant people should learn to think in terms of the cost per man second, not per man hour. Careless, wasteful practices are frequently tolerated simply because the individual practices only "cost a few hundred dollars a year." But when a lot of individual practices are added up, a whale of a total is often reached. There is never any excuse for waste, not even the waste of a penny in the operation of a plant. In order to provide more funds for research and distribution, it is the job of every plant manager to make certain he is not spending an unnecessary penny for anything in the operation of his plant.

Throughout the industry, without violating the Claydon Act there could be a lot more cooperation between firms. I have seen competitive firms located in the same town who could have saved a lot of money in freight and trucking expenses by pooling shipments. Neither could be persuaded to join in such a venture because each was afraid the other would find out how much he was selling. And the fact is, generally, that each knows what the other is selling anyway within a reasonable percentage. Some firms won't cooperate even when, through Neilson and other reports, they know exactly what competitors are selling. Even closely held companies generally have enough incidental outside stock so that it is easy for competitors to find out the volume of business they are doing and what profit they are making from it.

Competitive firms could save a lot of money by operating jointly owned branches, but again this is hearsay.

Sometime ago I proposed that the industry subsidize certification laboratories to eliminate the competitive control work which every conscientious firm feels obliged to go through. When you consider the fact that a single batch of a chemical made by Dow, Monsanto, Mallinckrodt or Merck is likely to be split up among twenty or thirty customers, all of whom will go through the same control routine, the amount of waste involved in duplication of effort is apparent.

There are a lot of ways in which the smaller and medium sized firms could cooperate to mutual advantage, but they still shy away from it. Firms do cooperate in establishing control standards and through their associations, they cooperate in legal matters affecting the operation of their business. But cooperation could be extended into many activities which now are considered by every firm sacrosanct. What's wrong, for example, with cooperative purchasing? The department stores have done it for decades. Cooperative research would not only save a lot of money by elimination of duplicated effort, but it would stimulate research activities.

It is quite all right to be highly individualistic in sales efforts because here you've got to out-think, out-

smart, then out-fright the enemy—your competitors. But in the ordinary routines of business, operating figures should be as free as air and there should be a great deal more cooperative effort in reducing the cost of routine procedures that are common to all.

Correction

I wish to correct a serious printer's error in the September issue of Production Forum relating to Schupbach and Company in Burgdorf. "The article states that they can roll foil down to "fifteen thousandths"—this should have read 1.5 thousandths. Anybody can roll foil down to fifteen thousandths but it takes a really good operator to roll foil down to a point where it is thinner than tissue paper, and Schupbach is really a good outfit."

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

New Lyon Bulletin

A new bulletin has been issued describing and illustrating Lyon-Raymond's general line of material handling equipment including hydraulically-operated lift trucks, pallet trucks, elevating tables, high lift trucks and feeding equipment. Write for bulletin 201, Lyon-Raymond Corporation, 3591 Madison Ave., Greene, N. Y.

Shovel-Dump Truck

The laborious and rather limited wheelbarrow has been superseded by a scoop-dump electric truck developed by the Yale and Towne Manufacturing Co.

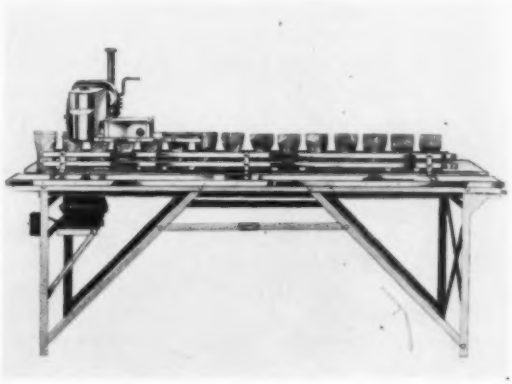
In the case illustrated, the self loading scoop of the truck transports from storage locations to hoppers and

then discharges onto conveyors which carry the materials to mixing machine. In this manner the truck is useful in batching processes since a dump mechanism makes it possible to tilt the scoop at a wide range of angles, regulating the rate of discharge. Otherwise the truck embodies the same features of maneuverability, speed and simplicity of operation as the more coventional fork truck.

For information write to Yale & Towne Mfg. Co., Philadelphia Div., Philadelphia 24.

Pack-Rite Conveyor

Pack-Rite has developed a conveyor that can be synchronized to operate with its Speedsealer as shown



in cut at 100 inches per minute, or with the Rotary sealer at 30 inches per minute.

Allowance for a 10-inch belt take-up is incorporated in the positive take-up at feed-in end of the conveyor. The conveyor can be made right or left hand feed direction. It is obtainable in three lengths, 8 feet, 6 feet, and 4 feet. Operating mechanism consists of motor with v-belt drive. Write to Pack-Rite Machines, 714 W. Wisconsin Ave., Milwaukee 1.

Tri-Clover Pump

Designed to exceed sanitary code requirements, Tri-Clover Machine Co., Kenosha, Wis., announces the new "Champion" series sanitary pumps, for diary, food processing and beverage industries use, and wherever corrosion-resistant pumps are required.

The pump is said to incorporate numerous exclusive features, including completely demountable head and working parts for rapid, thorough cleaning, patented carbon-faced neoprene seals, and improved impeller and case design to provide non-agitating action on liquids or semi-solids.

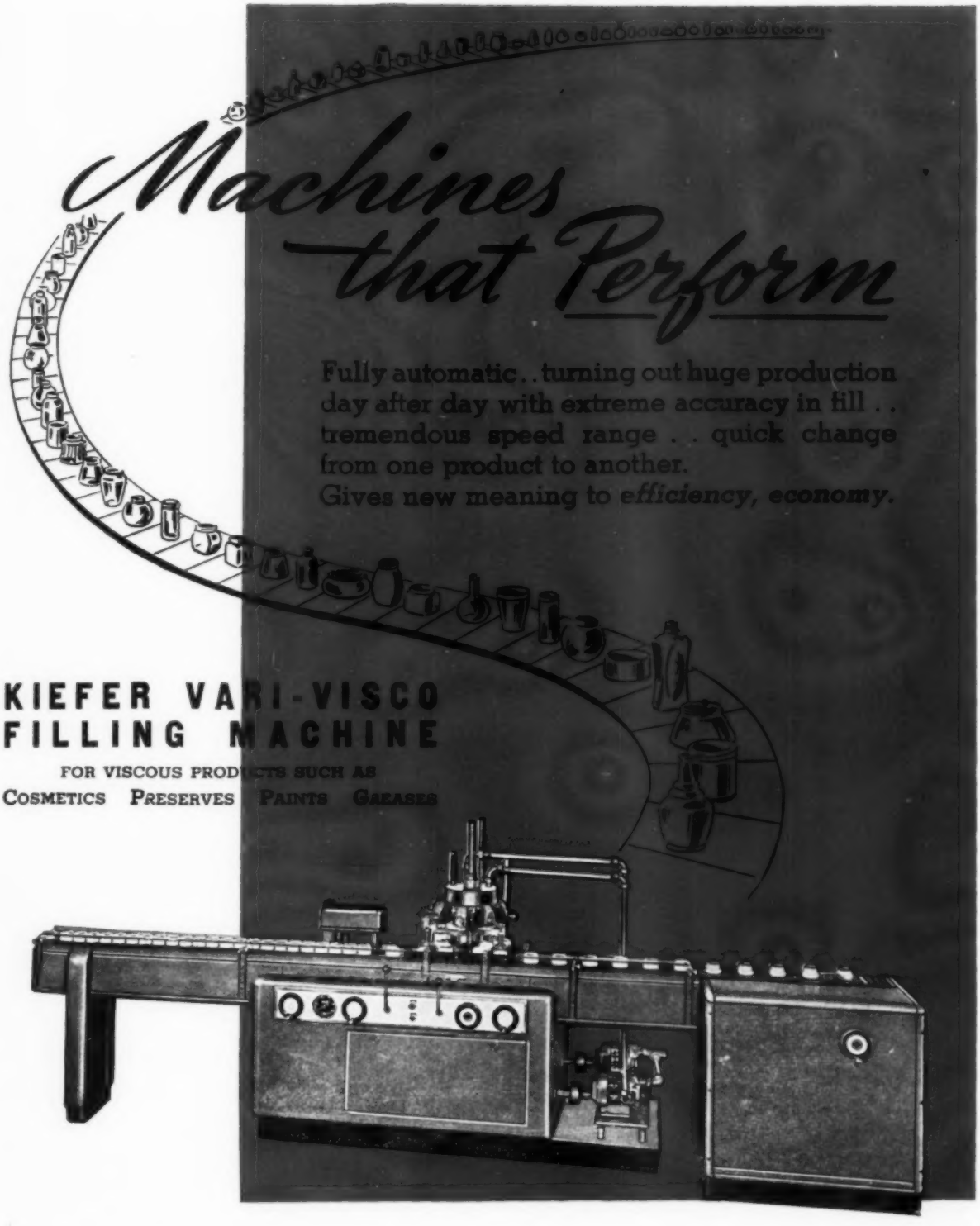
Bottling Handbook

A new edition of the "Bottling Engineer Handbook" is now available to companies requesting it. The book is prepared by the engineering department of the U. S. Bottlers' Machinery Co., Division F, 4015 N. Rockwell St., Chicago, 18.

The handbook is to familiarize manufacturers of liquid and semi-liquid products with the economic advantages of various types and designs of machines developed by the U. S. Bottlers' Company. It covers the uses of hand operated, semi-automatic and completely automatic machines for washing, air-drying and filling.

Machines that Perform

Fully automatic . . turning out huge production day after day with extreme accuracy in fill . . tremendous speed range . . quick change from one product to another.
Gives new meaning to *efficiency, economy.*



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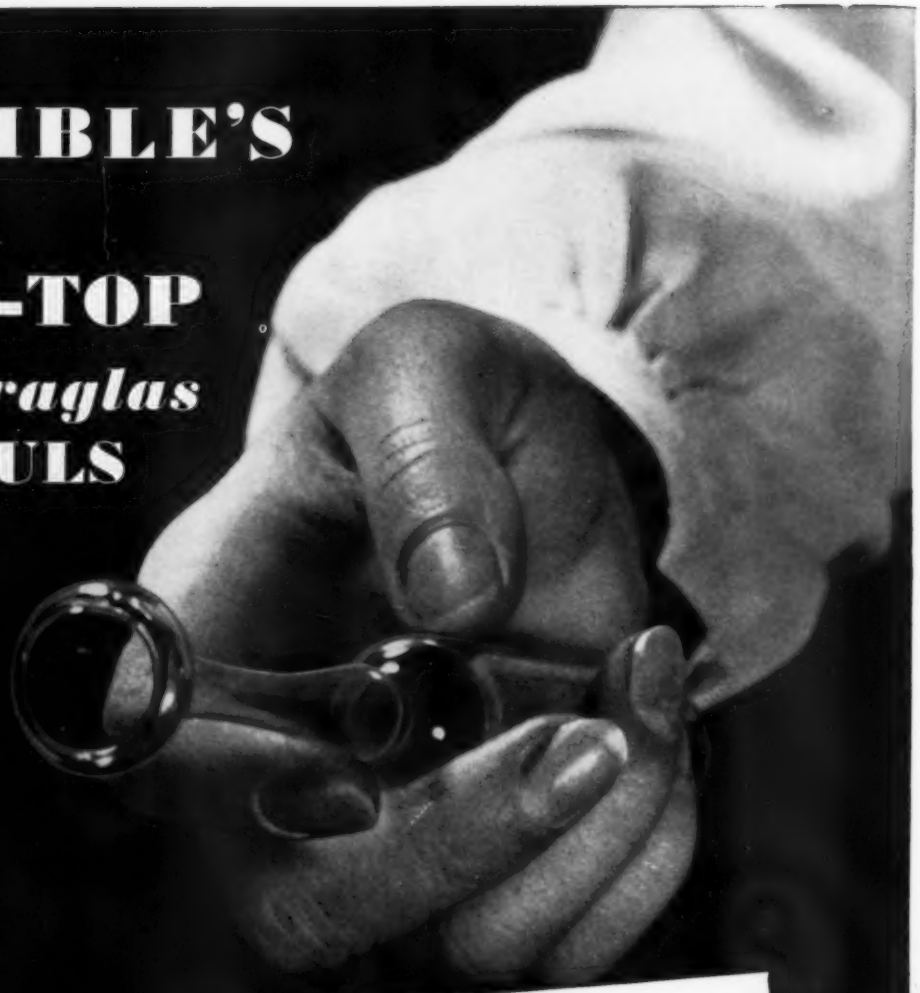

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Ross cartoning machines can and do work 'round the clock—without the profit-eating penalty of excessive downtime while converting from one size cartoning operation to another.

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Now's the time to get acquainted with the Ross way . . . the new and better way to mechanically handle all cartoning operations. *Use the coupon.*

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Ross cartoning machines are made in both semi-automatic and fully automatic types.

Operator demonstrates the ease of effecting a change-over by simply resetting the position of dial controlled units on the machine bed.

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Please send me without obligation your catalog and complete engineering and performance data on Ross cartoning machines.

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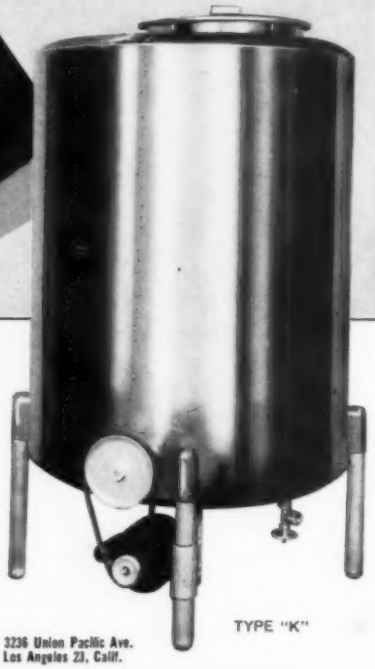
Your MIXING or STORAGE PROBLEMS can be Solved with a STAINLESS STEEL SAN-I-TANK



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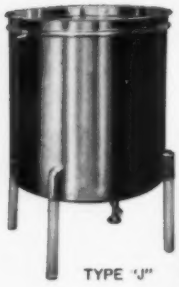

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WILL FILL FROM 1 OUNCE TO 1 GALLON JARS OR BOTTLES — 45 to 60 PER MINUTE
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Guaranteed Rebuilt Equipment

1—Colton No. 60 tube filler, crimper and closing machine, motor driven.
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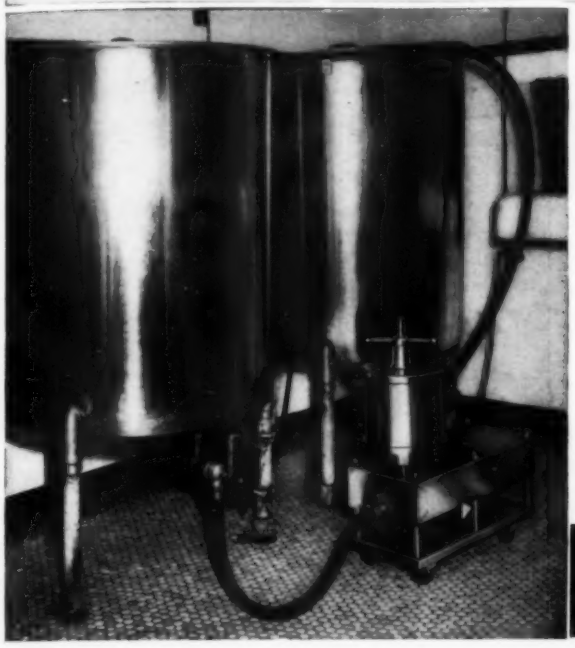

compact, portable, completely sealed

You can give your products a decided advantage in appearance and acceptance, plus uniform clarity and protection against undesirable impurities by using an Alsop "*Sealed-Disc*" Filter in your plant.

All Standard units capacities from 1 g.p.m. to thousands of g.p.h. are compact, portable, completely sealed against leakage and even evaporation. Available in Stainless Steel, Monel, and Nickel plated Brass and Bronze, they are easy to operate and maintain and provide long, efficient and reliable service.

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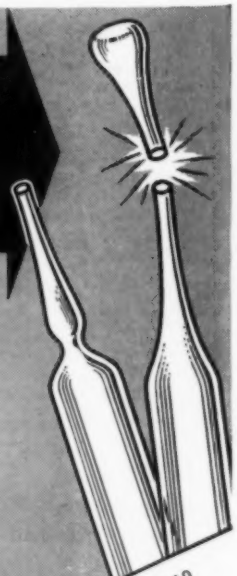

Special process breaks vacuum in ampoule before snipping, to minimize the foreign particles and glass dust that may be sucked in when ampoule end is cut off.

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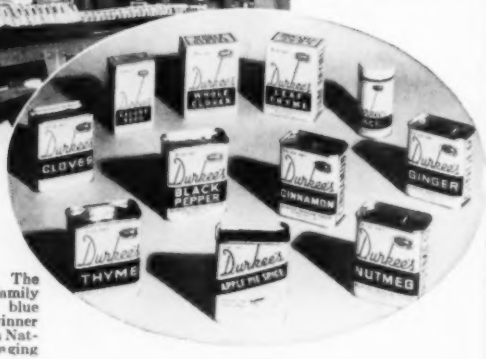
A BLUE RIBBON "FAMILY" uses S&S equipment

(Left) Illustration shows Model HG84 Automatic Duplex Filling Machine.



(Right) The Durkee family of spices, blue ribbon winner at the 11th National Packaging Show.

Recently, at the 11th National Packaging Show, Durkee Famous Foods received the blue ribbon award for their *entire family of spices.* No fewer than *eleven* individual packages were included in the award.

Naturally, Stokes & Smith is proud to have played a part in this happy event, as the prize-winning packages were all filled by Stokes & Smith equipment. Leading firms have long recognized the superiority of S&S filling, packaging and wrapping machines—machines at speeds to suit your needs.

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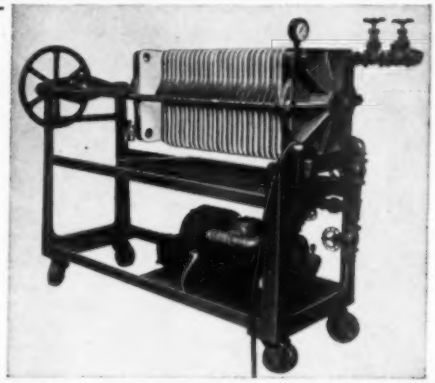

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HORM ASBESTOS FILTER PADS

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- No rubber washers used
- Adaptable to all types of filter mediums
- Rapid change of filter pads
- Construction Stainless Steel or Bronze (nickel plated)
- Suitable for coarse and fine filtration, including germproof and ultra-fine

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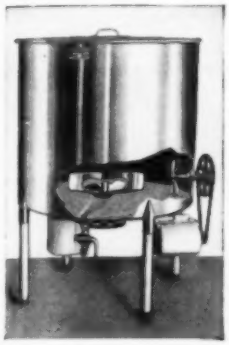
"Common Sense" DISC FILTER

- Designed for filtering water, chemicals, pharmaceuticals, oils, acids, alcohols.
- Operated with either filter paper, asbestos pads or filter cloth.
- Capacity for fairly clear water at 25 lbs. pressure is more than 300 gallons for the first hour.
- Equipped with or without pumping units.
- Easily cleaned.



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- Sizes: 30 gallon to 1000 gallon capacities.
- Fabricated of 18-8 stainless steel.
- 100% drainage.
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- Special tanks designed and fabricated.

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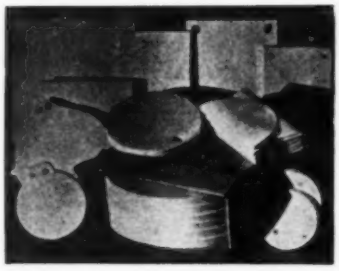

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Other FILPACO (formerly "Filco") Products: filter presses, glass-lined storage and mixing tanks, filling machines, portable agitators, sanitary fittings, tygon tubing, hose, "easy-ride" gravity wheel conveyors, solid roller conveyors, booster conveyors, sanitary and industrial pumps, filter cloth and bags, filter felt, asbestos pads, activated carbons, filter aids.

The FILTER PAPER Co.

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1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
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4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
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6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

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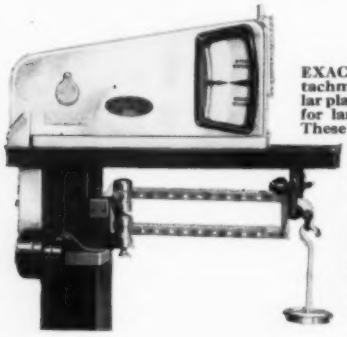

EXACT WEIGHT Indicating Attachment Model No. 4016 for regular platform scales. Ideal equipment for large compounding operations. These attachments substitute visible weight control for guesswork beam balancing, save in overweight, eliminate underweight, materially speed up your work. Actually this simple devise transforms an ordinary scale into a precision model at low cost. Users report savings in time and product from two to ten times the cost of the attachment. Fits any heavy duty scale regardless of capacity.

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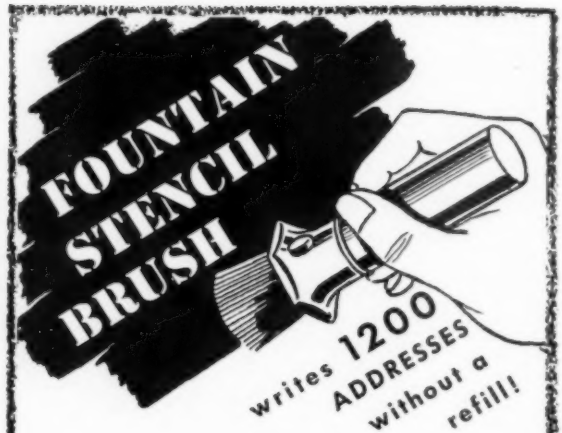

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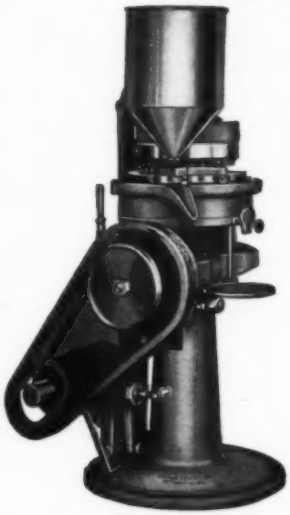

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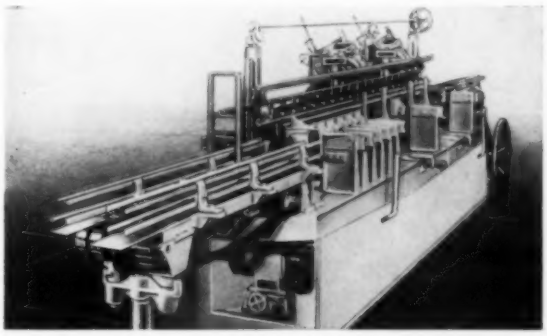

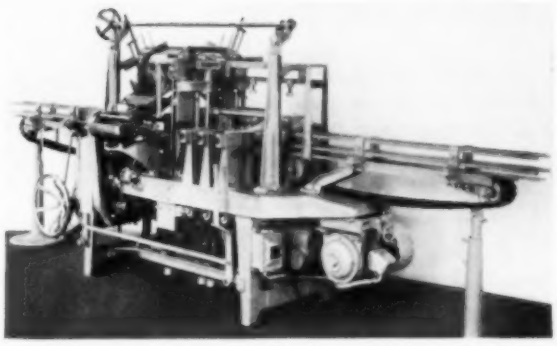

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YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Trade-Mark Consultant

DECISIONS in trade-mark cases still keep coming thick and fast and sometimes confusing.

A recent decision of the Commissioner of Patents is concerned with the question of actual use and amount of use of a trade-mark.

I am constantly being asked questions of kind of use, amount of use and so on. The answer is difficult. It turns mostly upon intent of the trade-mark owner. It is quite usual to make the first sale of goods bearing a newly adopted trade-mark by selling across the state's lines to individuals but thereafter in many cases actual use ceases for a long time. Yet actual continued use must take place to preserve your trade-mark.

Circumstances of delay between that first sale and actual placing of the goods on the retail market are obvious and would no doubt be resolved in the trade-mark owner's favor, as long as diligence was practiced.

Under the present Trade-Mark Act of 1946, use has been somewhat defined. Non-use for two consecutive years has been set up as one possible abandonment of the mark. Intent to abandon, however, is also mentioned; hence my mention of the real intent of the trade-mark owner.

Certainly, after the first sales for trade-mark application purposes, it is not satisfactory to just forget all about using the mark, but the amount of use has not been defined.

In this decision I referred to, Assistant Commissioner Frazer helped somewhat in clarifying use.

The cause of action was an opposition by American Pharmaceutical Company, Inc. to the trade-mark application of Vitamin Corporation of America for registration of the notation "VCA" arranged upon a map and in connection with a grotesque figure, the dominant feature of the mark being held to be the letters "VCA." The opposer had adopted these same initials VCA for the same type of goods (vitamin products) much prior to the date of use claimed in the application, namely 1936 against 1942, but presumably had never registered same. The opposition was upheld despite the fact that the evidence indicated use of the mark by the opposer, American Pharmaceutical, more or less continuous but not extensive from 1936, which use was principally, at least, in *intrastate* use. This was held as sufficient bar to prevent registration of a confusingly similar mark.

Here then is a case where a trade-mark user who had not registered his mark, as so many people failed to do under the old 1905 Act, was successfully in proving prior rights by an intrastate use which was not extensive.

Thus, use in every case becomes a matter of fact and of purpose. Protective marks, registered but not used, and simply taken out to bar others are not permitted in this country. But any *bona-fide* user of a trade-mark can be protected even with limited or sporadic use if he can prove his honest intentions. Under the terms of the new Act, after five years proof of use of a registered trade-mark will have to be filed, under penalty of cancellation in the sixth year. However, if use is not proven, a registrant may submit plausible reasons for such non-use with a statement that he has no intention of abandoning the mark and thus he may be allowed to preserve the mark under some conditions of non-use.

This choice of five years was because many trade-marks fail to be used after such a period of life and if they go beyond the period they usually will continue to thrive.

Thus, under the old Act, a mark may still be on the register barring another potential user thereof even though abandoned. Proof of such abandonment could, of course, be produced in order to clear the way for the newcomer but such proof is hard to obtain.

In another recent decision rendered by Mr. Frazer he stated that although the petitioner had attempted to prove that the trade-mark owner had in fact abandoned the mark, he had failed to prove the point, for although he sent investigators to a number of stores, who reported that they were unable to find for sale any product bearing the trade-mark in contest, nevertheless, their search was not sufficiently exhaustive even to indicate that the mark is not extensively used, much less to prove its abandonment.

Summing up these decisions, therefore, you can keep your trade-mark position strong by making sure that you keep a continued sale of goods even if this is in part intrastate. If you keep good records of these sales and if you maintain a genuine effort to avoid technical abandonment, it will be hard for anyone to prove you have abandoned and easy for you to support your trade-marks in any controversy.

The degree and kind of use can only depend on the goods concerned. But within these commercial factors you owe it to yourself to make secure your valuable trade-mark rights.

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Foreign Briefnotes

Finland

A recent decree in Finland extends to citizens of the United States reciprocal privileges with those of our Boykin Bill which means that you can still file a patent application in Finland even if your U. S. or other patent has issued.

British Trade-Marks

The President of the United States has issued a decree that owners of British Trade-Marks which were due for renewal in the war years and thus have expired can be renewed up to July 17, 1948.

Swiss Trade-Marks

The same situation arises as given above in Great Britain except that the date is June 30, 1948.

U. S. A. Owned Trade-Marks

You, as a U. S. owner of a British or Swiss trade-mark which should have been renewed after September 3, 1939 and before June 30, 1947, can still renew the mark up to the 1948 dates given in the above notes.

Special Re U. S. Trade-Marks

In case you are wondering where and when as to the marks you have re-registered or re-published under the Lanham Act, please note that the Patent Office states there are now about 13,000 cases under consideration filed under terms of the old laws and these will all have to be cleared up before any of the cases under the 1946 Law are considered. Therefore, no cases under the new Law can be expected until well into 1948 unless conditions alter very much.

The Trade-Marks listed here are dated June 4, 1947 to July 22, 1947 inclusive.

FAIRY TALE RED—VI—CE—510,757
Avon Products, Inc., New York, N. Y.
Ser. Oct. 12, 1946 D. U. Sept. 19, 1946

FIGARO—IV—I—508,715
Violet Clayson (Figaro Mfg. Co.), Grand Rapids, Mich.
Ser. Sept. 9, 1946 D. U. Aug. 15, 1946

FLEURS DE CHERIGAN—VI—BC—485,541
Parfumes Habana, S. A. Habana, Cuba
Ser. July 7, 1945 D. U. 1935

FOREVER AMBER (with des.)—VI—B—489,716
Kay Daumit, assignor to Kathryn, Inc., Chicago, Ill.
Ser. Oct. 10, 1945 D. U. Mar. 30, 1945

FRU-FRU—VI—B—481,432
Saenz, Brionea & Cia., Buenos Aires, Argentina
Ser. Mar. 28, 1945 D. U. Sept. 14, 1942

FURIOUS—VI—BC—508,416
Kay Daumit, assignor to Kathryn, Inc., Chicago, Ill.
Ser. Sept. 3, 1946 D. U. July 24, 1945

GAMMATONE—VI—T—511,063
California Spray-Chemical Corp., Wilmington, Del
Ser. Oct. 18, 1946 D. U. Sept. 18, 1946

GAMTONE—VI—T—511,062
California Spray-Chemical Corp., Wilmington, Del.
Ser. Oct. 18, 1946 D. U. Sept. 18. 1946

GENTLEMEN'S AGREEMENT—VI—C—512,744
Lehn & Fink Products Corp., Bloomfield, N. J.
Ser. Nov. 16, 1946 D. U. Oct. 15, 1946

GLIM—IV—M—501,731
General Aniline & Film Corp., New York, N. Y.
Ser. May 9, 1946 D. U. Apr. 2, 1946

GREEVER'S—VI—I—493,187
Greever's Inc., Chilhowie, Va.
Ser. Dec. 13, 1945 D. U. Sept. 1, 1945
Reg. 431,069 July 1, 1947

GUNG HO—VI—BCH—501,789
Thomas Ung (United China Trading Co.), Los Angeles, Calif.
Ser. May 9, 1946 D. U. Apr. 2, 1946

HIDDEN TREASURE—IV—AM—504,058
Heber N. Miller (Miller Manufacturing Co.), Morton, Ill.
Ser. June 17, 1946 D. U. Mar. 26, 1940

HIDE-X—VI—M—501,579
Lehman Bros., Cleveland, Ohio
Ser. May 7, 1946 D. U. Apr. 27, 1946
Reg. 431,073 July 1, 1947

HIGH COMMAND—VI—I—499,276
Purex Products, Inc., Baltimore, Md.
Ser. Mar. 29, 1946 D. U. June 6, 1945

JEROME—VI—B—502,645
Les Parfums Verchere (Parfums Jerome), S.A.R.L., Paris, Fr.
Ser. May 23, 1946 D. U. Mar. 20, 1945

KENROSA—VI—ABCHI—497,184
Kenrosa Limited, London, England
Ser. Feb. 25, 1946 D. U. 1917

KRANIO—VI—H—509,517
John H. Keares, Ephrata, Pa.
Ser. Sept. 21, 1946 D. U. Sept. 9, 1946

KWITZ—VI—M—503,578
Kolar Labs, Inc., Chicago, Ill.
Ser. June 10, 1946 D. U. June 1, 1946

LANOPLUS—VI—ABC—510,323
Lanolin Plus Cosmetics, Inc., Chicago, Ill.
Ser. Oct. 5, 1946 D. U. Aug. 12, 1942

LA-RAY—VI—AH—506,261
Kurt R. Peterson (La-Ray Products), Elgin, Ill.
Ser. July 25, 1946 D. U. Mar. 25, 1946

LAUXIDE—VI—T—488,859
I. F. Lauks, Inc., Seattle, Wash.
Ser. Sept. 22, 1945 D. U. Jan. 19, 1945

LAVA SOAP—IV—A—503,130
The Procter & Gamble Co., Cincinnati, Ohio
Ser. May 31, 1946 D. U. 1893

LE DEBUT—VI—BCD—493,598
Richard Hudnut, New York, N. Y.
Ser. Dec. 20, 1945 D. U. May 29, 1945

LELANI—VI—ABCDEH—505,546
Associated Products, Inc., Chicago, Ill.
Ser. July 13, 1946 D. U. June 20, 1946

LITTLE DOGIE—VI—I—509,113
M. C. Wentz (M. C. Wentz Co.), Pasadena, Calif.
Ser. Sept. 14, 1946 D. U. Aug. 26, 1946

LUMIERE DE PARIS—VI—BC—505,545
Perfums Verlayne, S. A. R. L., Paris, France
Ser. Sept. 5, 1946 D. U. Nov. 29, 1945

LUSTRE EASE—IV—M—503,355
Andrew Decapio, (Globe Cleaning Co.), Mansfield, Ohio
Ser. June 6, 1946 D. U. Nov. 1, 1945

M (with des.)—VI—AT—498,298
Midland Labs., Dubuque, Iowa
Ser. Mar. 15, 1946 D. U. May 1, 1945

MALMAISON—VI—BC—481,433
Saenz, Briones & Cia., Buenos Aires, Argentina
Ser. Mar. 28, 1945 D. U. Oct. 9, 1943

MEADOWBROOK—VI—CDI—508,205
Avon Products, Inc., New York, N. Y.
Ser. Aug. 29, 1946 D. U. Apr. 17, 1946

MIGHTY FOAM (with des.)—IV—M—508,428
A. Arthur Jaffe (Mighty Foam Co.), Scranton, Pa.
Ser. Sept. 3, 1946 D. U. July 10, 1946

MILK-TONE—VI—C—491,600
Tone Labs., Inc., assignor to Helena Rubenstein, Inc., New York, N. Y.
Ser. Nov. 14, 1945 D. U. Oct. 31, 1945
Reg. 431,129 July 8, 1947

MINT LIPS—VI—C—503,615
M. T. Strommen, Arcadia, Calif.
Ser. June 10, 1946 D. U. Mar. 10, 1930
Reg. 431,147 July 8, 1947

NIBLIC—VI—I—514,182
Colgate Palmolive-Peet Co., Jersey City, N. J.
Ser. Dec. 13, 1946 D. U. Nov. 22, 1946

NOVADYE—VI—M—495,402
Nova Chemical Corp., New York, N. Y.
Ser. Jan. 25, 1946 D. U. Jan. 9, 1946
Reg. 431,133 July 8, 1947

NUIT DE DECEMBRE—VI—BC—508,473
Rosaria Maria Catherine Foscolo, Paris, France
Ser. Sept. 4, 1946 D. U. Aug. 28, 1946

OAKEN BUCKET—VI—BCDI—508,003
Sherman Perr, Newark, N. J.
Ser. Aug. 24, 1946, D. U. June 29, 1946

(Continued on page 543)

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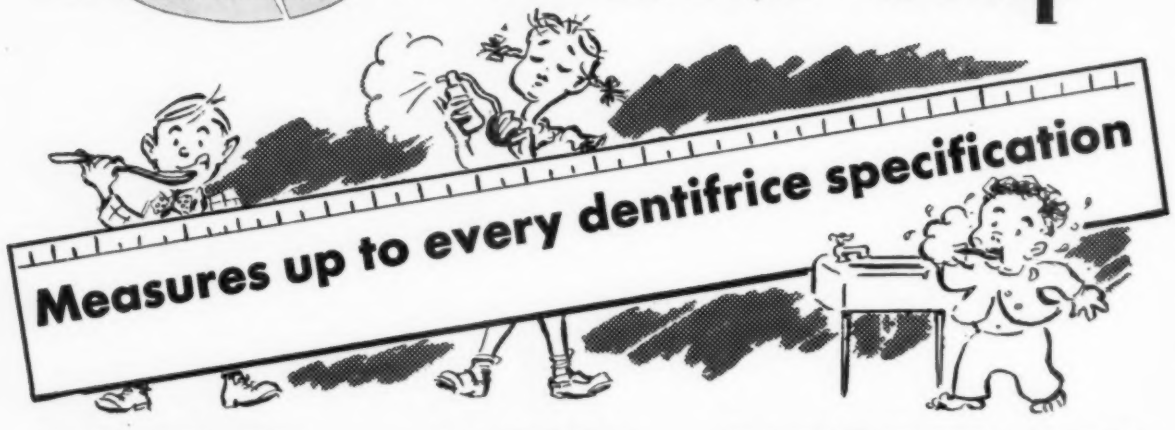

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Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

Patents and Football

By the time this article reaches the reader the college football season will be well under way. Doubtless, by this time many of the teams which gave much promise, prior to and during the early stages of the season, will have fallen by the wayside or be on the way out as contenders for any of the numerous titles in the football firmament.

It is not at all improbable that among the leaders will be found some teams who are more or less habitually on top of the list. Some of the leaders will likely be newcomers to such airy football heights. Most of the teams out of the running will be those who are at home in such a position.

There are probably those who study such statistics assiduously and analyze them carefully in order to attempt to ferret out the secret of success of certain teams and—equally important to those who take their football seriously and are not rewarded by an all-winning team—to find why some teams are failures.

One does not have to be an expert in such matters to know that there are many factors which enter the picture and that among them are the calibre of the coach and his players, and the amount of "emphasis" placed upon such matters by the school authorities. But why is it that, even after making due allowances for differences in personnel and emphasis, some schools possess materially better records over a period of years?

Perhaps the answer may be found in the fact that all the winning football teams spend a lot of time and effort in mastering the "fundamentals" of the game, unexciting little things like blocking, tackling, mental drills, etc.

As there are winning football teams there are also "winning patent teams," i.e., organizations and individuals who are prolific patentees. Also, as in the case of football teams, there are a number of factors that enter into the patent picture. Some organizations and individuals do not "emphasize" patents. Some individuals and organizations do not deal in matters likely to result in patents. Nevertheless, some studies made in recent years show a definite patent propensity on the part of certain organizations and individuals. Why should that be the case?

Perhaps the answer is the same as in the case of the winning football teams. Perhaps it is because the winning patent teams also have spent a lot of time and effort in mastering certain "fundamentals" of the patent game. I do not refer here to the legal side of patents, which of course is the field of the patent attorney. I do refer to the many things inventors can do to help their own cause, unexciting little things like keeping proper records, obtaining sufficient information relative to the invention so that it can be promptly and adequately protected, cooperating with the patent attorney prior to and during the prosecution of the patent application, etc.

When one considers that a fairly good measure of the ability and competence of research individuals and organizations can be obtained by studying their patent activity, it appears that those who want to be on a winning patent team might well take a leaf out of the football peoples' book and do some hard work on fundamentals.

Several patents of interest in the medicinal field were issued recently. A few have been selected for detailed consideration here.

Tuberculosis Preparations

Numerous workers have found, to their disappointment, that though they succeeded in developing compounds which have the desired properties, often the compounds because of certain inherent undesirable physical or chemical properties could not be used for the purpose in mind.

In the field of therapeutics, for example, a number of nitrogen-containing compounds possess certain desired therapeutic properties. Some of these compounds are bases, which are undesirable either because they are generally oily liquids or low melting solids, or because they are practically insoluble in water and are somewhat unstable, coloring upon standing. Furthermore, the decomposition products may be toxic and deleterious or the acid salts of the bases may be too acid for injection purposes.

Friedman and Braitberg apparently ran across this problem and recently obtained two patents (U. S. 2,426,011 and 2,426,012) on their solution of the problem. The patents are assigned on their face to Pyridium Corporation, of Yonkers, N. Y.

The bases Friedman and Braitberg worked with are 2-alkoxy 5-amino pyridines. The inventors solved their problem by converting these bases to the corresponding glucose bisulfite compounds (U. S. 2,426,011) or to the glucosidamino compounds of the alkoxy pyridines (U. S. 2,426,012).

According to the patentees their compounds "possess highly therapeutic values over those of their corresponding basic compounds."

The patentees further state:

"These therapeutic compounds of our invention are stable preparations and hence they can be administered in combination with food, in capsules, in tablet form, or parenterally injected in the form of a solution, and they, therefore, possess highly valuable physical, stable and administrative properties over their corresponding basic compounds.

"We have found further, that these therapeutic compounds of our invention are particularly valuable in their effectiveness against *Mycobacterium tuberculosis*, although their usefulness is not limited to that particular disease, and that this effectiveness in the treatment of disease is greater than that possessed by the corresponding basic compounds.

"We have found, further, that these therapeutic compounds of our invention are less toxic than the corresponding basic compounds, and that they also possess the additional unexpected property of being practically unaffected in their anti-bacterial action in the presence of such biological inhibitory substances as p-aminobenzoic acid,

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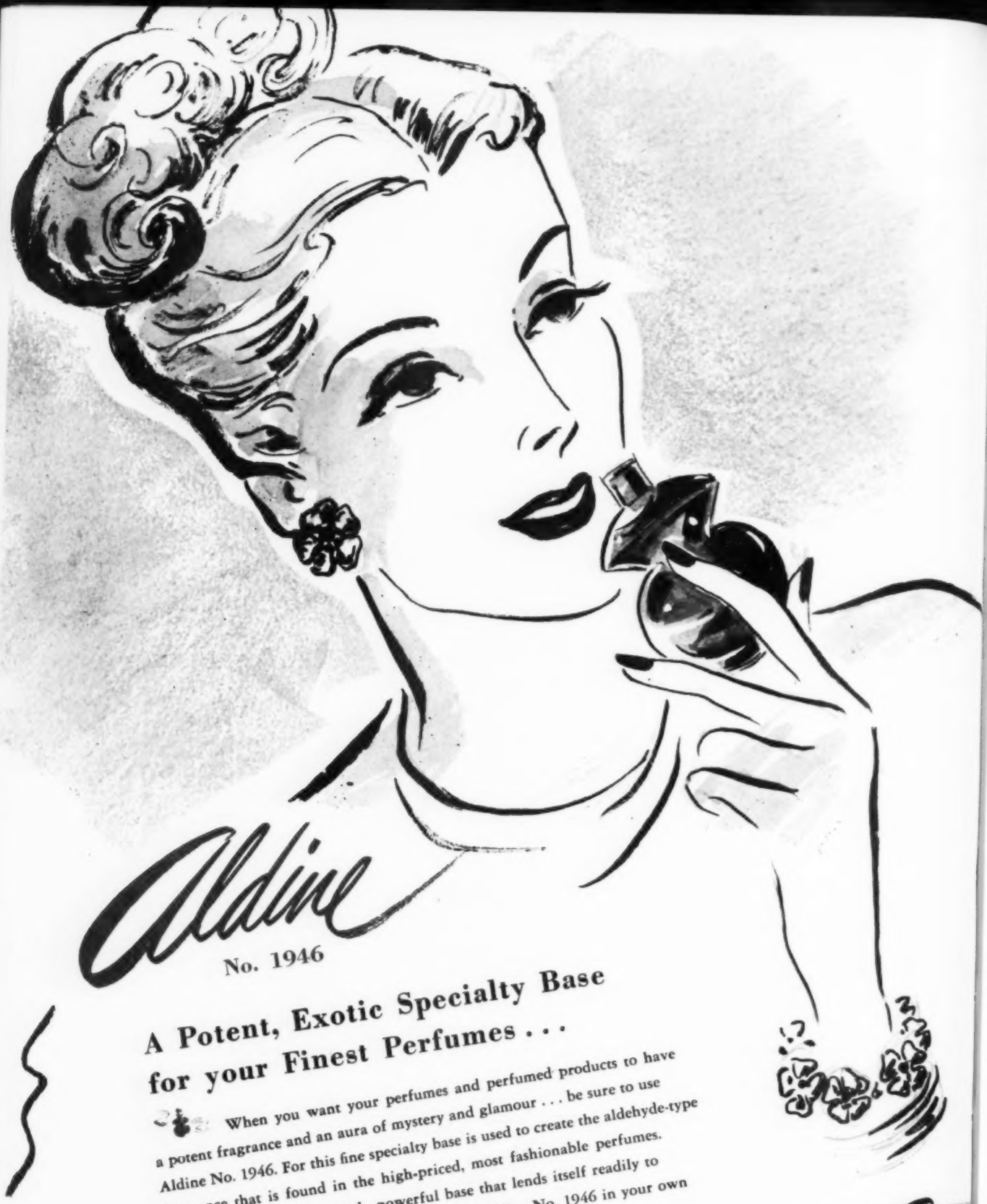

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peptones, serum, pus, etc., which are present in living organisms, which substances seriously reduce the effectiveness of other compounds.

"This action of these therapeutic compounds of our invention against *Mycobacterium tuberculosis* is particularly unexpected and remarkable as they are relatively without effect against other pathogenic organisms such as *E. coli*, *Staphylococcus aureus* and *Streptococcus pyogenes*.

"Further, substances which were hitherto known to have activity against *Mycobacterium tuberculosis*, such as certain sulfonamide and related compounds, are greatly, if not completely, inhibited in the presence of biological inhibitory substances, which is known to account for the lack of sufficient tuberculosis activity of those previously known compounds.

"Some of the inhibitory substances which are present in the human organism include paraaminobenzoic acid, serum, peptones, pus and other protein degradation products which have high content of inhibitory substances. Some of these inhibitory substances in the lesions of tuberculosis and other diseases, which produce large amounts of tissue break-down, play a very important role in the inhibition of sulfonamide and sulfone compounds, and as a result of this inhibitory mechanism, therapeutic trials on the whole failed.

"The activity of therapeutic compounds of our invention against *Mycobacterium tuberculosis* is not diminished when p-aminobenzoic acid, peptones, serum, pus, etc., are present. We have found that these compounds of our invention inhibit the growth of various strains of tuberculosis organisms in various dilutions, some diluted as high as one part to 25 million, depending upon the medium and strain of tuberculosis organism used.

"As these inhibitory substances are present in the tubercular host, it is impossible to produce the desired therapeutic effect with sulfonamide and sulfone compounds, and hence any compounds which would practically retain their bacteriostatic properties irrespective of the inhibitory substances present would be of the highest value.

"This property of the therapeutic compounds included within our invention of being practically uninhibited in bacteriostatic effectiveness, and especially in bacteriostatic effect against *Mycobacterium tuberculosis*, is entirely unexpected and cannot be predicated upon any prior knowledge relative to previously known bacteriostatic compounds, and is of the greatest importance and value in the treatment of infection.

"By 'inhibitory substances' in our specification and claims, we mean those substances which prevent the bacteriostatic action normally manifested by compounds in their absence, but which do not inhibit the bacteriostatic activities of the therapeutic compounds of our invention.

"We have found that when adequate precautions are taken to administer our compounds in such a manner and with such frequency as to insure a desired concentration of the respective compounds in the blood stream, they are effective in the treatment of tuberculosis.

"Another advantage of the compounds of our invention is that following administration by whatever route chosen, concentration of the respective compounds in the blood of the recipient animals are higher and can be maintained with greater safety than is possible with the corresponding basic compounds."

The new compounds are prepared by reacting the free amine with an aqueous solution of glucose and an alkali metal bisulfite (U. S. 2,426,011) or by reacting the free amine with glucose in an absolute alcohol in the presence of a small quantity of ammonium chloride (U. S. 2,426,012).

Data regarding the activity of some of the compounds against *Mycobacterium tuberculosis*, is given below:

U. S. 2,426,011

Name of compound	Highest dilution showing bacteriostasis
2-ethoxy, 5-aminopyridine sodium glucose bisulfite	1/3,125
2-butoxy, 5-aminopyridine sodium glucose bisulfite	1/800,000
2-hexyloxy, 5-aminopyridine sodium glucose bisulfite	1/1,600,000
2-isoamyloxy, 5-aminopyridine sodium glucose bisulfite	1/50,000
2-allyloxy, 5-aminopyridine sodium glucose bisulfite	1/1,600,000
2-methoxyethoxy, 5-aminopyridine sodium glucose bisulfide	1/25,000
2-phenyloxy, 5-aminopyridine sodium glucose bisulfite	1/1,563

U. S. 2,426,012

Name of compound	Highest dilution showing bacteriostasis
2-ethoxy, 5-glucosidaminopyridine	1/25,000
2-butoxy, 5-glucosidaminopyridine	1/1,600,000
2-hexyloxy, 5-glucosidaminopyridine	1/1,600,000
2-isoamyloxy, 5-glucosidaminopyridine	1/100,000
2-allyloxy, 5-glucosidaminopyridine	1/200,000
2-methoxyethoxy, 5-glucosidaminopyridine	1/50,000

Iodine-Containing Fungicide

Preparations said to be suitable for the treatment of fungus infections of the scalp and of the skin, such as tinea tonsuraus, ringworm of the groin and "athlete's foot" are protected by U.S. Patent 2,425,285, assigned to The Hersch-Razel Research Foundation, Phildaelphia.

According to the patent, though the fungistatic and fungicidal properties of iodine against ringworm fungi were known no wholly satisfactory provisions had previously been made for utilizing the iodine in an effective manner without irritation or injury of the skin and body tissues.

Strickler, the inventor, proposes to use chlorophyll as a catalyst and photosensitizer. As a source of oxygen and iron red blood cells (human or animal) are used. Preferably, an additional source of oxygen is employed and for this purpose magnesium peroxide is said to be satisfactory. Since the action is photodynamic a source of energy is necessary, a quartz-mercury are being found suitable in this connection.

The scope of protection appears rather broad, claim 1 reading as follows:

A therapeutic agent for topical application comprising iodine activated by ultra-violet light in the presence of chlorophyll, heme as a source of iron, and a material continuously evolving oxygen.

Other Patents

U. S. 2,423,108—**(Sharp & Dohme)—N³-Carboxyacyl Metanilamides.**

U. S. 2,423,252—**(Helene Curtis)—Hair dressing and drying apparatus.**

U. S. 2,423,517—**(Roche Organon)—3-Keto-20,21-Dihydroxy Saturated Pregnanes.**

U. S. 2,424,007—**(Abbott Labs.)—Intermediates for biotin. 2-Omega-Carbalkoxy Alkyl-3-Oxo-4-Carbalkoxy Tetrahydrothiophene.**

U. S. 2,424,061—**(Eli Lilly)—Antimalarials. 9-Amino-Alkyl-Amino-Substituted Acridines.**

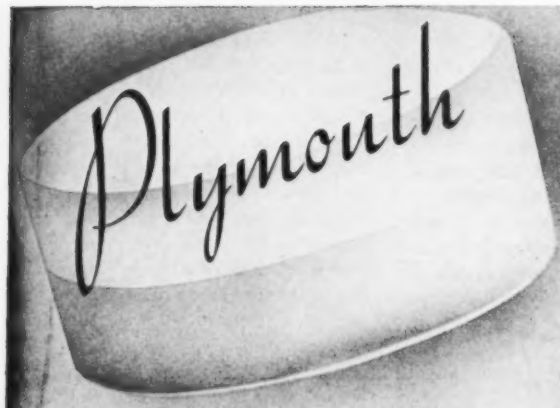
U. S 2,424,664—**(duPont)—N-Beta-Cyanoethylalkane-Sulfonamides.**

U. S. 2,424,221—**3-(May & Baker)—Production of Amidine Salts.**

U. S. 2,425,326—**(U p j o h n)—2-p-Aminobenzene Sulfoamido)-4 Hydroxy-5,6,7,8-Tetrahydroquinazoline.**

U. S. 2,425,721-3—**(University of Michigan Regents)—T h i o p h e n e compounds. Therapeutics.**

U. S. 2,425,730—**(Ciba)—N-S u b s t i t u t e d T h y m o x y-Acetamidines. Anticholinergic and Atropine-l i k e activity.**



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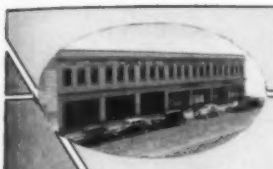

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Compounder's Corner

New Approach to Cake Make-up Production

The existance of the patent for the original cake make-up, says R. Presslie (*S. P. C.* 20:665, 1947) has induced many cosmetic workers to experiment with cake make-up formulation in attempts to avoid conflicting with the specifications and claims of the patent. That some have succeeded is evident from the fact that there are now at least half a dozen different products of this type on the market. And, since these new cake make-ups are promoted by firms of world-wide repute who could not afford to sponsor an inferior product, much less to infringe existing patent rights, it is obvious that today's cosmetic chemists are capable of considerable ingenuity. Presslie's approach to this problem is essentially one of manufacture (as against one of choice of ingredients); resulting in a molded, non-compressed type of cake.

The standard method of manufacture is, essentially, to prepare a liquid cream, add the fillers and pigments, dry the mixture, pulverize it and compress it into molds. After considering the various ingredients and their proportions, as given in the patent, Presslie suggests that the obstacles can be overcome by the following approach to formulation:

Diethylene glycol stearate	**25 per cent**
Zinc oxide	**30 " "**
Titanium dioxide	**20 " "**
Sulphonated castor oil	**15 " "**
Talc	**5 " "**
Color	**5 " "**

While there is nothing new about the components, the method of preparing the cake differs entirely from that outlined in the patent. Instead of making an emulsion with the oil, wax and water, then adding the dry ingredients and dehydrating the mixture, this make-up is *never hydrated*. The diethylene glycol stearate is melted, at a temperature just above melting point to prevent discoloring; the powders are mixed with the sulphonated oil and milled for preference, then this paste is added to the melted wax and thoroughly admixed. The product is poured into suitable molds and allowed to cool. When cool, the make-up sets to a firm cake, and, owing to contraction, is easily removed. The new surface exposed is not like the proprietary cake, which is matt, but is shiny and smooth. One advantage of this feature is that if the mold is embossed with a design it comes up clearly on the cake. There is also a great saving in time and equipment; the steps of emulsification, drying, pulverizing and compressing being entirely eliminated. If a matt surface is desired, it is suggested that the molds be dusted before filling; using a powder consisting of zinc oxide, titanium dioxide, talc and color as previously employed, thus ensuring that the surface will have the same shade as the rest of the cake.

According to Presslie, cake make-up prepared by this method becomes an oil-in-water emulsion containing suspended pigments, when wetted in the manner of normal usage; the large percentage of titanium dioxide offsets any tendency to waxiness. "Take-off" is very good, spreading on the skin homogeneous, and ability to hold a coating of face powder satisfactory.

Booklet on Phenyl Mercurics

Data on the formation, properties and uses of phenyl mercuric compounds as effective germicides and fungicides are given in a recently published booklet. Tables of molecular weight, melting point and solubility of the various compounds, as well as brief descriptions of methods of use in various industries, including drug and cosmetic products, are presented. A comprehensive bibliography enchances the usefulness of the publication. The booklet, "Phenyl Mercurics," is available on request from The Edwal Laboratories, Inc., 732 Federal Street, Chicago 5, Ill. or to Metalsalts, Inc., 200 Wagaraw Road, Hawthorne, N. J.

Neutral Compatible Vehicle

A neutral vehicle and digestive, said to be particularly useful for carrying nauseant drugs, is being suggested to physicians by the Joint Committee on Professional Relations of the Medical Society of New Jersey and the New Jersey Pharmaceutical Association. The formula for this "Elixir Papain and Diastase," as cited in the *Journal of the American Pharmaceutical Association*, Practical Pharmacy Edition (8:286, 1947) is as follows:

Papain	**1.8 Gm.**
Diastase	**1.8 "**
Glycerin	**36.0 cc.**
Alcohol	**21.6 "**
Water, to make	**120.0 "**

It is flavored with compound spirit of orange and colored with solution amaranth. The preparation produces no incompatibilities with carbonate or other alkaline salts and is compatible with most other drugs.

Ammonium Salts vs Dental Caries

According to the findings of R. G. Kesel, J. F. O'Donnell, E. R. Kirch and E. C. Wach (Am. J. Orthodont. & Oral Surg. *(33:80, 1947)*, *ammonium salts may be useful for controlling dental caries. In their studies of the saliva of caries-free individuals for a factor which inhibited the growth of* Lactobacillus acidophilus (*present when dental caries are formed*), *ammonia seemed to be an end product in all the filtrates. Ammonium carbonate added to sterile broth as a culture medium was found to inhibit the growth of* L. acidophilus *to an extent parallel to salivary culture filtrates with similar ammonia nitrogen concentrations. Further tests indicated that it was ammonia, and not the alkalinity imparted by the ammonia, which was responsible for the effect. A mouth rinse and a tooth powder, each containing 5 per cent of dibasic ammonium phosphate, were prepared. A control group of 10 patients and an experimental group of 45 patients were selected. The patients in the experimental group were instructed to use the powder and rinse upon arising and before retiring each day. The control group was given a rinse and a powder of the same formula, but without dibasic ammonium phosphate, for use in the same manner. Both groups were told to report at regular intervals for bacterial counts. In all but one of the experimental group, the* L. acidophilus *count was markedly reduced after one year of such treatment, whereas there was*

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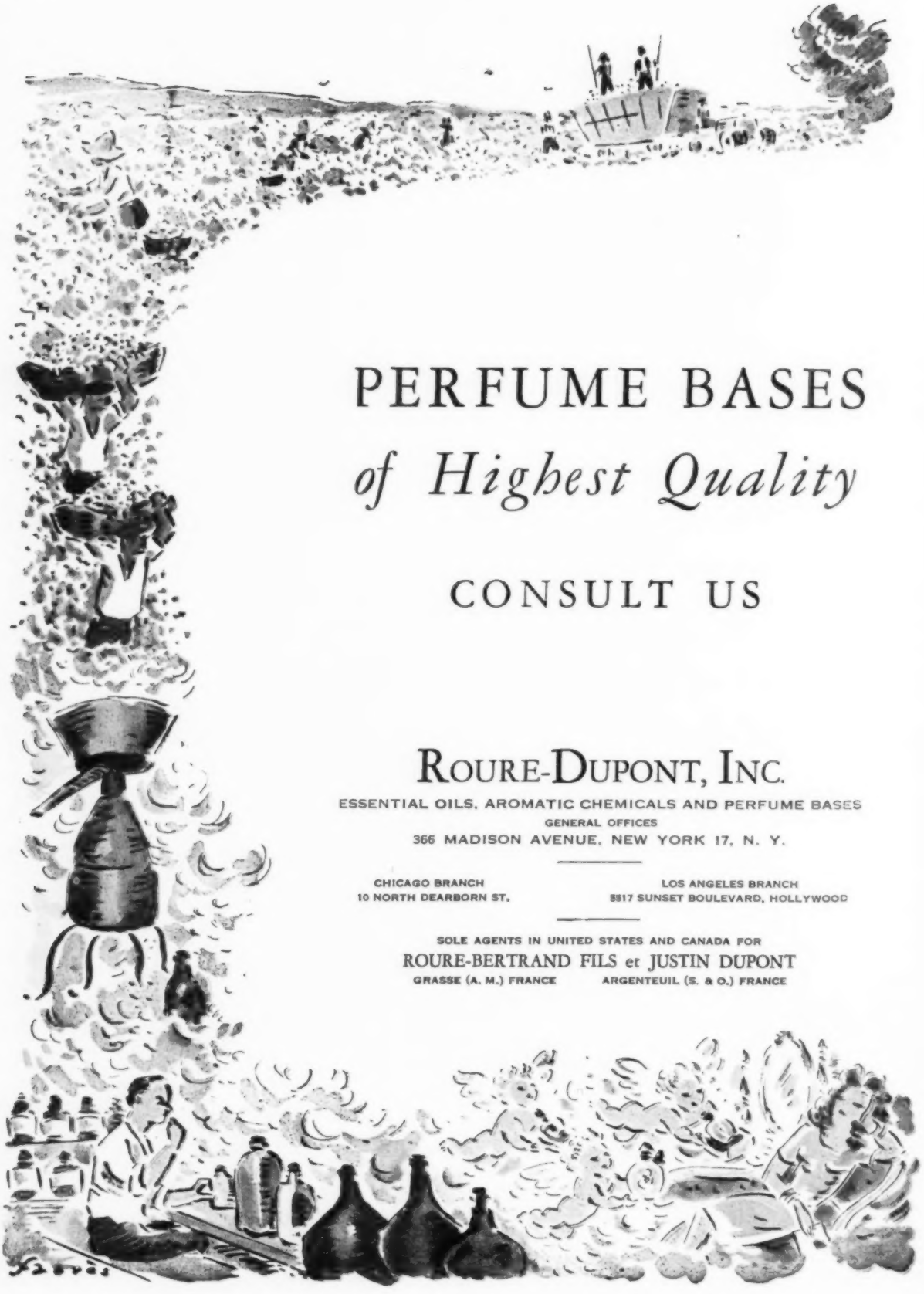

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no appreciable change in the count in the saliva of the control group. The one exception proved to be an unco-operative patient.

Previous work by other investigators had shown that urea (carbamide) is effective in reducing the incidence of dental caries. On the basis of these findings, 3 per cent of urea was incorporated into the rinse and powder used in the previous experiments and minor changes were made in the other ingredients to better mask the urea taste. The formulas for the two preparations were as follows:

Rinse

Dibasic ammonium phosphate	**50.0 Gm.**
Urea	**30.0 "**
Glycerine	**100.0 cc.**
Alcohol	**40.0 "**
Saccharin sodium	**1.0 Gm.**
Menthol	**0.4 "**
Amaranth solution, U.S.P.	**2.0 "**
Sodium benzoate	**1.0 Gm.**
Distilled water, to make	**1000.00 cc.**

Powder

Dibasic ammonium phosphate	**50.0 Gm.**
Urea	**30.0 "**
Bentonite	**50.0 "**
Pptd. calcium carbonate	**866.0 "**
Saccharin	**2.0 "**
Menthol	**2.0 "**
Peppermint oil	**2.0 cc.**
Cinnamon oil	**1.0 "**
Methyl salicylate	**6.0 "**
"Duponal"	**10.0 Gm.**

Experiments under way indicate that the combination of urea and dibasic ammonium phosphate is more effective as an antibacterial and antacid than either alone.

Lotion Containing Lanolin

Experiments were conducted by H. L. Kendall and H. G. Dekay (*J. Am. Pharm. Assoc.*, Pract. Pharm. Ed. 8:415, 1947) to formulate a satisfactory hand and face lotion containing lanolin and having the following properties: (1) not greasy, (2) not sticky, (3) moderately thick, (4) rub into skin completely, (5) soothing and protective, (6) pleasing appearance, (7) suitable odor, and (8) inexpensive to make.

After trying a number of preparations the sample selected as most suitable had all of the desirable properties listed above. It was of a creamy white appearance. After 300 days' storage at 35°F. there was no change observable in color, appearance or properties. At 94° F. the preparation gradually darkened in color up to 110 days, after which there seemed to be no further darkening. The final color was a cream shade rather than pure white, but was not objectionable. At room temperature there was no observable change for 190 days. At 300 days there was very slight darkening in color.

The formula of the selected sample is as follows:

Glyceryl monostearate self-emulsifying	**35 Gm.**
Stearic acid	**25 "**
Propylene glycol	**50 cc.**
Anhydrous lanolin	**10 Gm.**
Alcohol	**50 cc.**
Triethanolamine	**10 "**
Perfume	**1 "**
Distilled water, to make	**1000 "**

1. Melt and bring to 90° C. the glyceryl monostearate, stearic acid, propylene glycol, anhydrous lanolin, and 100 cc. of distilled water.
2. Place the triethanolamine and 50 cc. of distilled water in a beaker and heat to 90° C.
3. Add (2) to (1) in a slow stream while stirring (by hand).
4. Add gradually, while stirring (by hand) enough distilled water to make 949 cc.
5. Dissolve the perfume in the alcohol.
6. Add (5) to (4) when (4) is cool.

Foot Dusting Powder

In the Practitioner (*No. 949, 47, 1947*), *J. Ingram points out that the character of sweating in hot weather tends to activate a latent ringworm infection of the toes. The following dusting powder is to be used as a routine toilet measure:—*

Sodium hexametaphosphate	**5 parts**
Salicylic acid	**2 "**
Zinc oxide, Talc, Boric acid	**to 100 parts**

The feet should be carefully washed, soaked in a solution of potassium permanganate (1 in 4000), and thoroughly dried before the powder is applied.

Booklet on Aluminum Hydroxide Gel

Aluminum hydroxide gel, well established in the treatment of peptic ulcer, has also found important uses in conjunction with the oral administration of penicillin. Considerable valuable information on this material is available in the booklet, "Aluminum Hydroxide Gels," issued by the Reheis Company, Inc., 88 Shipman St., Newark 2, N. J. Data is also given on concentrated compressed aluminum hydroxide gel, useful for making aluminum hydroxide gel, U. S. P. XIII, aluminum hydroxide, mineral oil emulsions, and other products.

Non-Smearing Lipstick Patent

According to the claims of M. Kilmist, in British patent 525,337, a liquid lipstick which will not smear when it comes in contact with articles of clothing, cigarettes, etc., can be prepared with the following ingredients:

	% by Weight
Volatile organic solvent	**65-95**
Plasticizer	**3-15**
Cellulose ester	**1-12**
Coloring matter	**0.05-3**

This lipstick, when applied to the lips, is said to form a moisture-proof and smear-proof coating.

The preferred cellulose ester is ethyl cellulose, and ethyl alcohol, alone or mixed with acetone, has been found very satisfactory as volatile solvent. The plasticizer must depend on the solvent. It should be of organic character and soluble in the solvent used. Glycerine, methyl abietate, castor oil, and particularly hydrogenated methyl abietate are suggested. To eliminate a stinging sensation which has been experienced when this preparation was applied to the lips, a volatile hydrocarbon such as mineral spirits or petroleum ether can be added. This is particularly successful if first saturated by agitation with water. Perfumes, preservatives, antioxidants, etc., may also be added.

Cleansing Powder for Instruments

According to a note in the *Bulletin of The American Society of Hospital Pharmacists* (4:26, 1947) a powder, which, when dissolved in water, makes a solution for cleaning surgical instruments and glassware, has the following composition:

Disodium phosph., heptahydrate	**59.2**
Soda ash	**27.8**
Sulfonated organic detergent	**5.5**
Sodium sulfate	**7.5**

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ADVANCING THERAPY

Radar Therapy

The use of microwaves for heating living tissue may soon be practicable, according to the observations made by F. H. Krusen and his associates (*Proc. Staff. Meet. Mayo Clin.* 22:209, 1947). They found that radar waves can be directed in a beam and focused accurately on any surface of the body. A movable director permits the heating of tissues in a variety of patterns and allows the patient to move about unencumbered by pads or the like.

Streptomycin in Otitis Media

In order to determine its efficacy J. B. Holt and F. B. Snell (*Arch. Otolaryngol,* 45:169, 1947) used streptomycin in 20 cases of suppurative otitis media representing 26 ears infected with gram-negative organisms. Two Gm. of streptomycin was given daily for five days. The 2 Gm. of the drug was dissolved in 24 cc. of sterile water and given in 2 cc. doses intramuscularly every two hours day and night. The ears were dried daily, and streptomycin drops were instilled into the external canals hourly throughout the waking hours. Complete drying of all discharge occurred in 50 per cent of the infected ears. Improvement was noted in 31 per cent. Nineteen per cent showed no improvement. Tests with the infecting organisms for sensitivity to streptomycin suggests that there is a rapid development of resistance to the antibiotic.

Injection of Vitamin D

Experimental work on rats was carried out by H. Vollmer and B. L. Oser (*J. Pediatrics* 30:446, 1947) to determine the comparative therapeutic and prophylactic effect of a single massive dose of vitamin D_2 administered orally in oil, intramuscularly in oil and intramuscularly in oil-ether solution. The superiority of the oil-ether injection and the oil injection over the oral doses was statistically significant. The superiority of the parenteral vitamin D_2 administration in an oil-ether vehicle in the therapeutic as well as the prophylactic experiments seems to indicate quick absorption and satisfactory retention of the vitamin administered by this method. The inferiority of the parenteral administration of vitamin D_2 in oil in the therapeutic experiments may be ascribed to a delayed vitamin D absorption from the oily deposit in the tissues. The inferiority of the oral administration of vitamin D_2 in oil in the prophylactic experiments may be explained by incomplete absorption of massive doses from the gastrointestinal tract and loss of vitamin D with the feces. If observations in animals are applicable to infants and children, say these workers, one may expect that intramuscular injection of a single massive dose of vitamin D_2 in an oil-ether vehicle will cure rickets at least as promptly as other methods of administration and is at least equivalent to the other methods in its prophylactic effect, giving complete protection against rickets for at least three months.

Aerosol Penicillin

The results of studies made by S. J. Prigal, T. H. McGavack, F. D. Speer and R. Harris (*J.A.M.A.* 134:932, 1947) show that the inhalation of penicillin aerosols produces a concentration of the drug sufficient to make it effective, not only in the treatment of bronchopulmonary disease, but also in the therapy of injections of other systems of organs where this antibiotic is indicated. A combined steam generator and aerosolizer was employed to produce the medicated aerosals. It was found that penicillin in aqueous solution did not form a stable aerosol. This difficulty was overcome by dissolving the penicillin in propylene glycol. It was noted that the glycol not only produces a stable aerosol, but that it contributed to the antibiotic properties of the blood as well. The stability of the aerosol was further enhanced when 5 per cent of glycerine was added to the solution of penicillin and propylene glycol.

These workers found that unusually high and prolonged levels of penicillin were obtained in the blood when this penicillin-propylene glycol aerosol was inhaled within a tent or from a breathing box. They feel that the tent method should be ideal for the treatment of infants and children, or whenever continuous treatment with penicillin is indicated. It is believed that the use of mixed aerosols, which is feasible with the new aerosolizer, opens up the possibility of applying these aerosols when the infection is of a mixed type and is not responsive to a single agent. Sulfonamide drugs, penicillin, streptomycin and other antibiotics can possibly be used in various combinations.

Soluble Phenolphthalein Laxative

A solubilized phenolphthalein laxative of low toxicity, the beta diglucoside derivative, has been studied and compared with U.S.P. phenolphthalein by M. Rosenthal, S. E. Cairncross and M. G. Gray (*Am. J. Digest. Dis.* 14:143, 1947). They point out that, as far as is known, phenolphthalein beta diglucoside is the only colorless, odorless, tasteless, water-soluble substance possessing laxative properties. While stable in solution, it is hydrolyzed in the intestine to liberate free phenolphthalein. Its aperient action is mild, yet thorough, and the persistence of such action for several days enables many patients accustomed to daily medication to reduce their requirements. The derivative has a distinct advantage in that it may be uniformly distributed in solid or liquid form, thus permitting exact dosages. Calculated on the basis of active principle, the effective dose of the diglucoside is about half that of phenolphthalein.

The range of effective dose was determined in seven clinical studies, covering all age groups. In five of these groups the diglucoside was compared with phenolphthalein and in two groups an elixir formulation was studied. The elixir, for oral administration, is a paltable and safe preparation consisting of 9 per cent of true fruit raspberry

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flavor, 38 per cent sugar, and 1.62 per cent of phenolphthalein beta deglucoside, with small amounts of supplementary flavoring. It is compounded to supply one grain per teaspoonful of the laxative principle. The active ingredient remains stable on ageing. Because of its form, the elixir enables rapid and complete absorption and greater uniformity of response, hence permitting smaller dosage.

Gelatin Solution for Shock

The value of gelatin solutions in the treatment of hemorrhagic shock has been investigated by S. O. Levinson, M. Janota, F. Arimoto and H. Nechcles (*Surg. Gynec. & Obstet.* 88:925, 1947). In their studies various brands of gelatin, gelatins with different degrees of hydrolysis and various concentrations of gelatin solutions were tried. On the basis of their experiences on dogs they recommend gelatin solution for use on patients. Gelatin cannot replace whole blood, nor is it a substitute for plasma, but it has value as an inexpensive, easily available agent to combat shock due to plasma loss. Experience with the use of gelatin solution on patients has been favorable.

Potassium Thiocyanate for

Potassium thiocyanate has long been used in the treatment of hypertension but there is considerable disagreement as to its value. G. Watkinson and G. Evans (*Brit. Med. J.* 1:595, 1947) think that the differences of opinion regarding the value of potassium thiocyanate are due to the narrow margin that exists on occasion between the therapeutic and the toxic dose of the drug, as also to the fact that a toxic rash may appear when the drug concentration in the blood is at a low level, and to the fact that the coincidental arteriosclerotic disease is not as yet either recognized or understood. They review observations on 60 patients with persistent hypertension. They place the patient at rest in bed for the first fortnight or three weeks with symptomatic treatment. After the effect of this treatment on general well-being and blood pressure has been noted, potassium thiocyanate is given for from four to ten days if indications for its use are still present. At the end of one week's treatment the serum thiocyanate concentration is estimated. The quantity of potassium thiocyanate administered should be based on serum estimations. Blood pressure readings are no criterion of dosage. A scheme of dosage is given together with indications for treatment. Symptomatic relief and a significant fall in blood pressure were observed in roughly 60 per cent of the cases. The further observations of 42 patients show that the effect of thiocyanate therapy can be correlated with the phases of the arteriosclerotic process, and that whereas symptomatic relief is given and blood pressure reduction is maintained in approximately 40 per cent of the cases, the continued administration of potassium thiocyanate does not prevent the continued progress of arteriosclerotic disease.

Vitamin C and Procaine Toxicity

In their report in *Anesthesia and Analgesia* (26:22, 1947), R. K. Richards and K. Kueter state that depletion of vitamin C results in a rapid and marked increase in sensitivity to the convulsive action of procaine in guinea pigs. This finding parallels the prolongation of the hypnotic effect of certain barbiturates in vitamin C deficiency previously reported by the authors. Starvation likewise lowers the resistance to the toxic action of procaine. Possible pathophysiologic reasons for these conditions and treatment are discussed. The results of these experiments suggest that liberal administration of dextrose and vitamin C prior to the use of large doses of procaine may increase the resistance against toxic side effects of this drug, particularly in patients in a poor nutritional condition.

Improved Preparation for Motion Sickness

The increasing volume of travel in this country particularly the growth of air travel, has made motion sickness and its relief a matter of growing importance. According to F. Damrau (*Med. Rec.* 106: 408, 1947), the term "motion sickness" is used to include seasickness, air sickness, train sickness and car sickness, for there is now general agreement that these conditions have a close relationship to each other in etiology and fundimental character. His survey of developments during recent years in the therapy of motion sickness indicates that scopolamine hydrobromide is an efficient agent for the prevention and treatment of this condition. However, for use in motion sickness, the partially detoxicated aminoxide of this salt appears to possess distinct advantages. The therapeutic potentialities of this salt, scopolamine aminoxide hydrobromide, are identical with those of the alkaloid from which it is derived, but the toxicity of the aminoxide is far less than that of the parent substance. In addition, its duration of action is much briefer, which is a desirable characteristic in the treatment of conditions like motion sickness. Therefore, because of lower toxicity, high effectiveness and shorter duration of action, Damrau feels that scopolamine aminoxide hydrobromide is superior to scopolamine hydrobromide for the therapy of motion sickness.

Ethyl Carbamate and Prostatic Cancer

The antiandrogenic treatment of prostatic cancer is not completely satisfactory, since remission of the disease was less than five years in duration in 80 per cent of the cases so treated. Because of this, C. Huggins, Sung Ting Yu and R. Jones, Jr. (*Science* 106:147, 1947) have investigated many possible chemotherapeutic agents in patients in whom relapse has occurred after endocrine control. However, they have found only one agent that is effective in ameliorating the disease when it has become androgen-independent and widespread. This agent is ethyl carbamate (urethane). Observations were made on four patients with prostatic cancer to determine the effects and mode of action of this agent. Ethyl carbamate was found to be a toxic drug which causes inhibition of some cases of prostatic cancer. In three patients with widespread cancer, there has been a considerable regression of the primary tumor, relief of pain, and improved sense of well-being, and a significant decrease of the acid phosphatase of the serum. One patient, at first showing improvement, died at the end of 33 days, after being given an average daily dose of 9 Grms. of ethyl carbamate. The drug must be administered with great caution and a white cell count must be made at frequent intervals. It is not considered safe to continue ethyl carbamate when the leucocyte count is less than 4,000 per cubic mm. or when nausea or vomiting occur.

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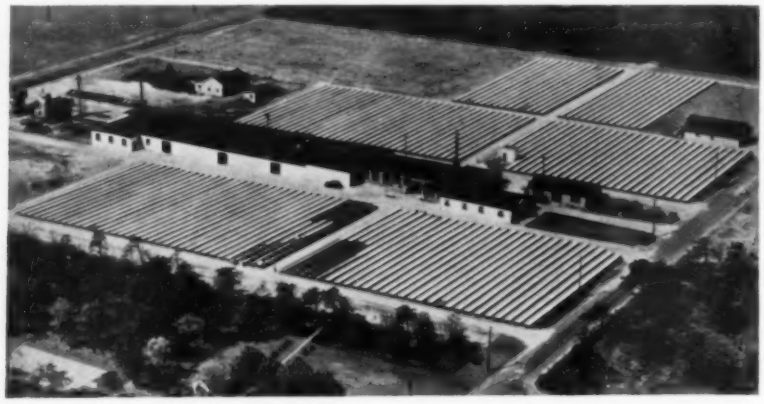

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Industry's Books

Occupational Diseases Of The Skin, by Louis Schwartz, M.D., Medical Director, United States Public Health Service, Louis Tulipan, M.D., Clinical Professor of Dermatology and Syphilology, New York University, and Samuel M. Peck, B.S., M.D., Dermatologist, Mt. Sinai Hospital, New York, Second Ed., 964 pp., Illus., Lea & Febiger, Phila., $12.50.

This work supplies the need for detailed and systematized knowledge of industrial dermatology. It describes the pertinent industrial processes and chemicals employed in this country, furnishes the background on which the actual dermatosis develops and assists in the determination of the possible irritants to which a worker may be exposed. The subject matter is arranged by trades, occupations and professions as well as by the causative agents, which makes it easy for the reader to find quickly the probable etiological irritant in the given trade or industry. The simple and brief descriptions of the industrial processes themselves are valuable to everyone who is interested in health hazards in industry. The second edition also describes those new chemicals and new methods of manufacture, many of them developed during the war, which are so rapidly and constantly being evolved. Of particular interest to this trade is the chapter XXI on cosmetics, pages 314-335.

The Guarantee of Annual Wages, by A. D. H. Kaplan, 269 pp., The Brookings Institution, Washington, $3.50.

This study is primarily concerned with current proposals which would start with the guarantee of substantially full-time pay rolls as overhead, in the expectation that, by having to meet these guarantees, industry would find ways to stabilize production and give greater security at higher levels of employment. It considers the problems with which business would be confronted to meet this obligation—the impact on total employment, on competitive practices, and on business fluctuations that make for insecurity. It also indicates some of the supplementary measures which would be required to give reality to the guarantees.

Epitome of the Pharmacopoeia of the United States and the National Formulary, Issued Under the Direction and Supervision of the Council on Pharmacy and Chemistry of the American Medical Association, 8th Ed., 238 pp., J. B. Lippincott Co., Phila., $2.

The first edition of the Epitome of the Pharmacopoeia of the United States and the National Formulary appeared in 1916. The present (eighth) edition follows the general plan of the previous editions and includes the drugs found in these two official compendiums (U.S.P. XIII and N.F. VIII). Descriptions of the official items are epitomized to contain the following information: Official titles, synonyms, brief definitions, concise descriptions of the physical properties, actions, uses and dosage. The dosage statements are taken from the Pharmacopoeia and the National Formulary and give average adult doses. In some instances further suggestions concerning dosage have been added. Those items that are believed to be of doubtful or no therapeutic value are commented on adversely.

Pharmaco-Therapeutic Notebook, by H. W. Tomski, Member of the Pharmaceutical Society, 280 pp., Williams & Wilkins Co., Baltimore, $4.50.

This book has been written to help the pharmacist in the collection of essential notes on the various aspects of pharmaceutical practice. Although primarily written from the pharmacist's point of view, these summarized and classified notes should aid the medical student in his studies and should help the busy general practitioner in the selection of the most efficient, the most appropriate and the least toxic remedy.

Cushny's Pharmacology and Therapeutics, Revised by Arthur Grollman, A.B., Ph.D., M.D., Professor of Medicine and Pharmacology, The Southwestern Medical College; and Donald Slaughter, B.S., M.D., Dean of the Medical School, University of South Dakota, Thirteenth Ed., 868 pages, Illus., Lea & Febiger, Phila., Cloth, $8.50.

The Thirteenth Ed. of this classic work has been re-edited by two well qualified successors to the eminent pharmacologists who have revised the four previous editions. Like their predecessors the present editors have succeeded in maintaining not merely the severly critical spirit and the rigorously scientific basis of the original work but much of the text as well. Pharmacology, during recent years, has undergone notable advances, particularly in the fields of chemotherapy, endocrinology, and the vitamins. The editors have incorporated into the present edition these changes while retaining those features which characterized the original "Cushny." It has been their purpose to prepare a textbook for the student and practitioner of medicine rather than a compendium of pharmacological knowledge. Some of the older material on the effect of drugs on isolated organs or the anesthetized animal, which formed the mainstay of classical pharmacology, has been deleted in favor of the more practical therapeutics of modern medicine. Only by emphasis on the scientific basis of therapeutics can modern pharmacology assume the important role in the medical curriculum which it merits. This new edition has incorporated a discussion of the important drugs which have been introduced into medicine during the past five years. They include the newer sulfonamide derivatives, penicillin, streptomycin and other antibiotics and folic acid. These and other drugs are making their first appearance in a textbook of pharmacology in the thirteenth edition of this work.

Colloid Science, A Symposium, Contributors: E. K. Rideal, A. E. Alexander, D. D. Eley, P. Johnson, F. Eirich, R. F. Tucket, J. H. Schulman, M. P. Perutz, G. S. Adair, G. B. B. M. Sutherland, and R. R. Smith, 208 pp., Chemical Publishing Co., Brooklyn, $6.00.

Based on a postgraduate course sponsored by the Department of Colloid Science, Cambridge University, under the auspices of the Royal Institute of Chemistry, this book deals with disperse systems and gives interpretations of phenomena encountered in surface films and interfaces. Phases and phase changes in monolayers, miltilayers, emulsion stability, absorbed films at the solid-liquid interface, electrical double layer, structure of micelles, electrophoresis, fat metabolism, membrane equilibrium, identification of bonds and structural units by infra-red spectra are among the important topics discussed in this volume.

Perfumer's Shelf

New Sources of Nerolidol and Farnesol

Nerolidol, an aliphatic sesquiterpene alcohol ($C_{15}H_{26}O$), was discovered in essential oil of neroli in 1902. The structure and synthesis of this alcohol were described by Ruzicka in 1923. This worker demonstrated that nerolidol and farnesol, an alcohol discovered in 1904 in essential oil of ambrette seed, show a relationship of structure of the same kind as that which exists between linalol and geraniol (or nerol).

The synthesis of nerolidol and the transformation of nerolidol into farnesol are respectively analogous to the synthesis of linaolol and the isomerization of linalol into geraniol (or nerol). This synthesis has been developed industrially. Starting with dihydropseudoionone obtained from linalol or geraniol, which is geranylacetone, the product is condensed with acetylene and the acetylene carbinol obtained is partially hydrogenated into nerolidol.

These two alcohols, nerolidol and farnesol have been discovered in a large number of natural products; they are frequently found in association, but most distillates contain only small percentages. Up to a few years ago, however, the most important sources were still the Ruzicka method of synthesis and its variants, costly operations resulting in racemic nerolidol, whilst the natural product is optically active.

In recent years, an essential oil of Brazilian origin, called oil of Cabreuva, has been placed on the market in great tonnage. Y.-R. Naves (*Perfumery & Essent. Oil Record* 38:191, 1947) has found that the batches of Cabreuva oil which he has handled contain about 80 per cent *d*-nerolidol and about 2.5 per cent farnesol. An essential oil commercialized for 20 years or so, extracted from a Brazilian tree similar to those from which Cabreuva oils are obtained, Red Wood (Pao Vermelho) oil is also very rich in nerolidol. These "sesquiterpene" oils are in all respects very similar to rosewood oils. Cabreuva oils contain nerolidol, farnesol, and a bisabolol, rosewood oils contain in corresponding proportions, linalol, geraniol (and nerol), *x*-terpineol, which are the terpene analogues of these three constituents. Nerolidol must therefore be placed in the category of easily isolated constituents and economically obtainable. One may look forward to a technical development in the chemistry and utilization of alipathic sesquiterpene products, equivalent to that of linalol geraniol nerol and their derivatives. Moreover, the disposal of nerolidol makes it possible to obtain cheaply various products necessary for the synthesis of many dietetic and pharmaceutical products of the vitamin type.

The trees from which these oils are obtained are found in tropical forests, notably in the Province of Rio de Janeiro. Both *Myrocarpus fastigiatus* Allem. and *Myrocarpus frondosus* Allem. are commonly called Cabreuva, Cabureiba, Cabriuva, Cabureicica and Cabureigba, as are more rarely various allied species. They are large trees 12 to 15 meters in height, whose wood is much used for the construction of houses and ships. By means of incisions an aromatic balsam similar to the balsams of Tolu and Peru is extracted from the tree. This is utilized in native medicine to heal wounds and ulcers. Its use is said to obviate scars.

In this same group of sophoreae, leguminosaepapilionaceae, belongs *Myrospermum erythroxylon* Allem. or Pao Vermelho (red wood) also found in the Province of Rio de Janeiro, a magnificent tree, odoriferous from root to leaves and of which the wood, a beautiful red, is used in both cabinetmaking and in the construction of houses and ships. The balsam (Oleo pardo = brown oil) is agreeably aromatic and for this reason is sometimes preferred to the balsam of "Pao balsamo" par excellence: Balsam of Peru.

Naves has carefully studied the composition of nerolidol isolated from Cabreuva oil, using for comparison nerolidol extracted from oil of petitgrain and nerolidol prepared synthetically from geranylacetone. His findings are published elsewhere.

Physics of Odor

In a brief discussion on the physics of odor in the *British Medical Journal* (2:81, 1947) it is stated that there is a general belief that material particles of odoriferous substances must come into contact with the olfactory receptors and that the actual stimulation is due to some chemical action. There can be no doubt that the odoriferous substance is carried in the air, but very small weights of such substance may scent a room for years without apparent loss of weight. Threshold concentrations have been measured for some substances, but naturally the threshold varies for different individuals and in the same individual from time to time, but the following threshold concentrations are given: skatol, 3×10^{-11}; synthetic musk, 4×10^{-18}; mercaptan, 3×10^{-9} % in air (w/w). The loss of weight of a substance required to give these concentrations in usual surroundings, say a room, although exceedingly minute is nevertheless calculable.

Spices in Medicine

In a very interesting article in the *Australasian Journal of Pharmacy* (28:400, 1947) it is noted that spices of all kinds have always attracted the attention of medicine and pharmacology, even in primitive times. Books about pharmacology and therapeutics in our libraries still contain a large number of spices, though many of them are used only in folk medicine and for proper preparation of food. In the early days, following the Crusades, spices were more appreciated than gold and jewels. Since then, spices have changed from objects of luxury to necessities of everyday use.

In the days before refrigeration, spices were essential to prevent the spoiling of meat or to overcome the taste and odor of meat that had become "over-ripe." Today, even though they do not contain nutritive values, spices have become important to the diet. In some cases, as in salt-free diets for kidney conditions and other ailments, spices are indispensable for imparting palatability to foods. Spices stimulate the flow of gastric juices and thus contribute to the digestibility of foods. Certain aromatic plants have a distinctly antiseptic action; they are effectual in diminishing fermentation in stomach and intestines. Others stimulate the appetite by arousing the salivary and gastric glands, the secretion of both liver and pancreas, and of the entire intestinal system, to increased activity. Cinnamon and cloves are the most representative of the aromatics, which are able to stimulate the glands of secretion. Thyme and fennel have a germ-killing

action besides. The efficacy of aromatics is destroyed in part when they are used in cooking. Heat may rob them of part of their virtues. Pepper, paprika, cayenne, horseradish, mustard are stimulating substances, which are able to increase the natural appetite. Aromatic spices, such as pimento, anise, cinnamon, cloves, ginger, nutmeg, and coriander are employed chiefly to flavor foods. In pharmacology tinctures of such spices are used chiefly to give flavor and color, and to stimulate the secretion of the stomach.

Cinnamon, one of the oldest known spices, was used by the Chinese as far back as 2700 B.C. From there it was imported to Egypt around 1600 B.C. Cinnamon has a reputation in folk medicine as a cure for colds. On spice wharves workers handling cinnamon are said to be exceptionally free from chest troubles.

Nutmeg was commonly used in the old days to treat insomnia. One crushed nutmeg was used to brew a pint of tea; a small cupful of which was taken before going to bed. Although saffron is now used chiefly as a coloring agent for foods, it held an important place in medicine in medieval times and for long afterwards. In the eighteenth century, saffron was recommended as a remedy for colic in infants. Greek and Arabic physicians found that saffron, in large doses, is a kind of hypnotic. Homeopathy uses saffron for severe bleeding from the nose, uterus and bladder.

Vanilla, considered one of the finest and most popular of all spices since its introduction to Europe by the Spanish conquerers of Mexico, was also used as a medicament in former times. It played a long-lasting part in the treatment of hysteria and hypochondria as well as in other nervous disorders. It was valued as an aphrodisiac. It was also used as a carminative; providing a sensation of warmth in the gullet, accompanied by a sense of well-being, increased appetite and relief from stomach troubles. Today, vanilla and its derivatives are used chiefly in medicine to conceal nauseous odors and tastes.

Fennel seeds, as well as the oil distilled from the seeds, are used as carminatives. Fennel oil was an important ingredient of a formerly popular eye wash. Ginger was once famous as an aphrodisiac and some people expect relief for headache, toothache and stomach ache from its use.

In modern medicine, mustard is used internally and externally. A mixture of mustard and warm water is a convenient emetic in emergencies, in cases of poisoning. Larger doses produce violent irritation of stomach and bowels, with vomiting, purging and pain in the abdomen. Externally mustard is used as liniment or plaster or mustard paper. Black mustard contains a glucoside, Sinigrin, and the ferment, Myrosin, which produces volatile oil in presence of water. Plaster and similar preparations are powerful skin irritants; they are used for neuritis, neuralgia, rheumatic pain and similar complaints. Mustard poultice, in which powdered mustard is sprinkled on an ordinary poultice, is popular in folk medicine. Spiritus Sinapis is a 2 per cent. solution of mustard oil in alcohol, rubbed into the skin for rheumatic and neuralgic pain. A mustard bath is used for stopping a beginning cold, relieving painful menstruation, relieving nervous tension, etc.

Peppermint was a widely used medicinal material. A tea from the leaves of peppermint is very popular, particularly in folk medicine. Wild mint was used as a carminative by the American Indians. In times when cholera ravaged the unhappy continents, it was a welcome beverage to replace the lost liquid without harm to the sensitive digestive organs. Menthol, obtained from oil of peppermint, is of course an important ingredient of many modern medical preparations.

Japanese Studies on Essential Oils

A number of studies made by Japanese investigators on various essential oils and related products are now becoming available and are being abstracted in American publications. For example, in the *Journal of the Chemical Society of Japan* (through *Chem. Abstr.* 41:3776, 1947) Tsutomi Naito has reported on the constituents of the volatile oil from the leaf of *Cinnamonum camphora* var. *glaucesens*. This oil, he found, consists of 34 per cent *l*-linalool and a small amount of *d*-alpha-pinene, camphene, dipentene, para-cymene, cineole, *dl*-alpha-terpineol, geraniol, safrole, camphor, and beta-caryophyllene.

In the same journal (through *Chem. Abstr.* 41:3586, 1947) Noboru Hasebe presented a study of the essential oil of *Ledum palustre* L. in Saghalien. In his investigations, 720 Gm. of the essential oil was obtained by the steam distillation of 100 kg. of the leaves of the plant. He found that the oil consists of a large amount of para-cymene, a terpene alcohol ($C_{10}H_{15}OH$), geraniol acetate, geraniol formate, a bicyclic sesquiterpene ($C_{15}H_{24}$), and a small amount of ledol ($C_{15}H_{26}O$).

Main Aldehyde of Sweet Orange Essence

In studies on the aldehydes present in the essence of sweet oranges from French Guinea, L. Benezet and G. Igolen (*Bull. soc. chim.*, 1946, p. 359) found that *n*-octanol is the main aldehyde. It is generally present in an amount ranging from 75 to 80 per cent. Other aldehydes present in this essence are nonylaldehyde, decylaldehyde, and citral.

Essential Oil of Phebalium Beckleri

In studies on the essential oils from the Queensland flora, S. E. Wright (*Univ. Queensland Papers, Dept. Chem.* 1:No. 26) investigated the essential oil of *Phebalium beckleri*. In his work, the leaves and terminal branches of the plant were subjected to steam distillation, and 0.15 per cent of a pleasant-smelling volatile oil was obtained. This oil, when washed with 5 per cent sodium carbonate and 5 per cent sodium hydroxide, dried over anhydrous sodium sulfate and distilled at 2 mm. pressure, yielded six fractions. Fraction 1, boiling at 27°C., consisted principally of pinene. Fraction 2, boiling at 33 to 35°C., contained pinene and ocemine. Fractions 3 through 6 consisted of sesquiterpenes and sesquiterpene alcohols, and boiled at 75 to 78°C.,84 to 87°C., 100 to 110°C, respectively. The pinene content totaled approximately 60per cent of the oil.

Oil of Cedrus Atlantica

According to J. Vandoni and P. Govinelli (*Rev. ital. essenge, profumi, piante offic., olii vegetali, saponi* 29:120, 1947, through *Chem. Abstr.* 41:5261, 1947), the deterpenated essential oil of *Cedrus atlantica* has a saponification number of 4.6 and an acetyl number of 69.7. By catalytic hydrogenation, the atlantone is transformed into hexahydroatlantone, tetrahydro-alpha-atlantol, and dihydro-gamma-atlantone, and the acetyl number becomes 53.12. The hydrogenated product is colorless and does not react with alkalies. It is suggested that atlantone acetate may be substituted for vetiveryl acetate in the manufacture of perfumes. Cedryl acetate, obtained by acetylation of deterpenated cedarwood oil, has better properties than those possessed by the raw oil for the preparation of perfumes.

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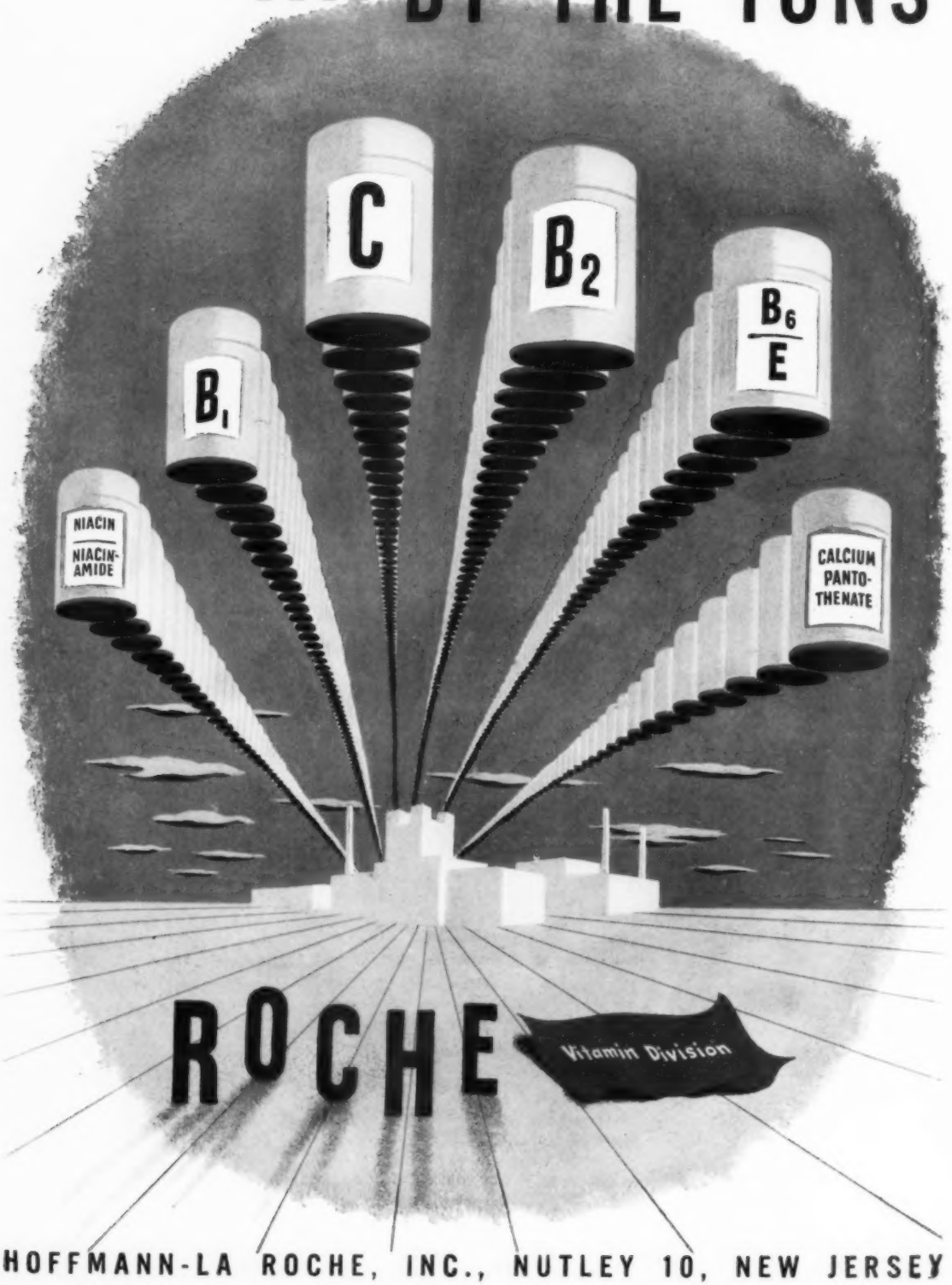

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Abreast of The Markets

Essential Oil Prices Lose Ground Again But More Stability Predicted. Mint Oils Unsettled.

A tabulation of the general list of essential oil prices shows that the majority of the oils continued to lose ground.

Buyers are still confining their purchases to quantities sufficient to meet present requirements. Some dealers are of the opinion that the decline from the abnormally high prices of many items caused by wartime shortages in evidence the past several months is nearing an end.

Trade sources report that shippers at primary sources are beginning to ignore bids for replacement oils, especially where lower prices are quoted.

Essential oil imports in June declined 40 percent from May arrivals. Receipts of foreign oils during the first 6 months of this year totaled 3,060,142 pounds, down 17 percent from the comparable 1946 period.

Mint Oils Unsettled

In commenting on the situation in mint oils, in which there is a considerable amount of interest at this time, the start of new crop distillation, it is pointed out, has already caused a moderate decline in oil peppermint prices and a substantial one in oil spearmint. Peppermint oil is reported as being very firm at the slightly lower levels established and holders of spearmint are beginning to resist attempts for still lower prices.

Present prospects for mint oil production in 1947 are about 4 percent below the August 1 indications, it was announced by the Bureau of Agricultural Economics. The bureau estimated the combined production of peppermint and spearmint oils at 2,034,000 pounds, about 26 percent above the 1946 production of 1,620,000 pounds, and 63 percent above the 1936-45 average of 1,245,000 pounds.

Peppermint oil production, on the basis of September 1 indicated yields, is expected to total 1,624,000 pounds, from the following states:—Indiana 615,000; Michigan 256,000; Oregon, 525,000; and Washington 238,000. No figures were supplied for California and Ohio this year because there is only one grower in these states. Last year production in Indiana amounted to 450,000 pounds; Michigan 266,000; California 16,000; Oregon 395,000; and Washington 206,000 pounds.

Production of spearmint oil is estimated at 410,000 pounds. Production is reported from each state as follows:—Indiana 280,000 pounds, as compared to 204,000 pounds last year, and Michigan 130,000 pounds, as compared to 82,000 pounds last year. No figures were supplied from California.

Dillweed Oil Firm

Dillweed oil is expected to be considerably below normal as to supply because of the difficulties with the crop. The early crop was struck by unfavorable weather and the later plantings were also affected, with the result that the crop is about 40 percent below what it should be. This situation was expected to have its influence on prices although dealers reported that as yet the range was unchanged. A strong market is expected for the product, however, and it was thought to be only a matter of time before prices go up. Some quarters reported that attempts were made to ease the poor yield by importing the oil from Europe. This was the first time this had been done since the war and while importers here were pleased to note that the oil was of high quality and arrived in good quantity, the cost of bringing it into the country was so high that it could not compete favorably against the American product.

Madagascar's Essential Oil Production and Exports

Madagascar's production of clove oil during 1947 was recently estimated at 30 metric tons and the export surplus, 30 metric tons. From January through April 1947, exports totaled 171 metric tons, in comparison with 331 metric tons during the entire year 1946.

The area planted to cloves during 1947 was estimated at 20,000 hectares, or 5,000 hectares less than in the preceding year.

Production of oil of ylang-ylang during 1947 was recently estimated at 22 metric tons, the 1947 export surplus amounting to that amount. Exports totaled 8.3 metric tons during the first 4 months, in comparison with 56 metric tons during the entire year 1946.

The area under cultivation in ylang-ylang during this year was recently placed at 1,500 hectares, compared with 1,800 hectares in 1946.

Exports of essential oils from Madagascar to the United States during January through April 1947 were as follows: clove oil 1,717 kilograms, lemongrass oil 88 kilograms; ylang-ylang 83 kilograms; and other essential oils 5 kilograms.

Madagascar's production of lemongrass oil during 1947 was recently estimated at 30 metric tons. The estimated export surplus for 1947 also was 30 metric tons. During the first 4 months of 1947, exports of the oil amounted to 8.8 metric tons, as compared with 45 metric tons for the entire year 1946.

The area under lemongrass cultivation during 1947 was placed at 8,000 hectares, or 2,000 hectares less than the 1946 total.

Production of Essential Oils, Spain

Production of orange, eucalyptus, and other essential oils in Spain is again up to prewar levels, reports the British press.

Arrivals of essential oils into the United States from Spain during the first half of 1947 were as follows (official U. S. statistics):

Cade 3,563 pounds, valued at $1,520; eucalyptus 8,960 pounds, $8,485; fennel 1,102 pounds, $2,707; juniper 11,534 pounds, $4,511; lavender 6,111 pounds, $13,961; spike lavender 106,263 pounds, $189,523; orange-flower 39 pounds, $4,289; pennyroyal 1,102 pounds, $3,829; rosemary 474 pounds, $1,278; rue 1,543 pounds, $6,109; sage 500 pounds, $728; and thyme 6,859 pounds, $15,660.

• Prices quoted in this section were current on the first of this month.

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Alcohol Production Up But Future Position Clouded By Raw Material Situation. Bromides, Menthol Higher.

Considerable price activity developed in the market for pharmaceutical chemicals during the period under review. Bromides came to the fore when leading producers advanced prices. Borax, natural menthol, silver bullion and derivatives, and stearic acid, were higher. Various seasonal items such as cod liver oil were more active and reflected a generally firm position for commodities now approaching the more active consuming period. Mercury continued a weak sister.

Alcohol Output Rises

Production of ethyl alcohol totaled 26,832,989 proof gallons during the month of July, the Alcohol Tax Unit, Treasury Department reported.

The figure is 3,040,589 proof gallons greater than the June figure and more than 9,000,000 gallons greater than July, 1946, the department reported.

July figures showed a gain of more than 4,000,000 wine gallons in the use of blackstrap molasses as a raw material for the basic solvent. A total of 14,154,442 gallons of blackstrap was consumed by industrial alcohol plants, compared to 10,267,807 gallons in June. The figure substantiates the trend in alcohol manufacture toward the greater use of molasses because of the record high corn prices and the prospects of a short corn crop.

Production of specially denatured alcohol showed a slight decline from 11,678,010 wine gallons in June to 11,388,961 wine gallons in July. Withdrawals showed a proportionate rise from 11,237,421 wine gallons in June to 11,875,779 wine gallons in July.

Stocks of industrial ethyl alcohol in bonded warehouses maintained a comparatively level trend. Total stocks in July were reported at 25,699,247 proof gallons, compared to a June figure of 25,341,018. Compared to July, 1946, however, stocks represent a sharp decline. July, 1946, total stocks reached 34,245,018 proof gallons.

Ephedrine Tight

An unusually heavy seasonal demand for synthetic ephedrine has placed producers in a back order position. Production of the salts namely alkaloid, sulphate and hydrochloride is virtually all sold for the balance of the year. The alkaloid is used in oil solutions for local application to mucous membranes, while the sulphate is employed in the treatment of asthma, hay fever, and emphysema. Prior to the war the major source of ephedrine was from the herb ephedra vulgaris. Largest quantities of the herb were secured from Shensi Province in China. Between 300 to 500 tons of the herb were available at Tientsin each year and imports into the United States ran in excess of 450,000 pounds annually with a value of around $30,000.

Some small lots of ephedra herb are available on spot but current prices are three to four times higher than the prewar prices of around 3c to 4c per pound.

Bromides Up

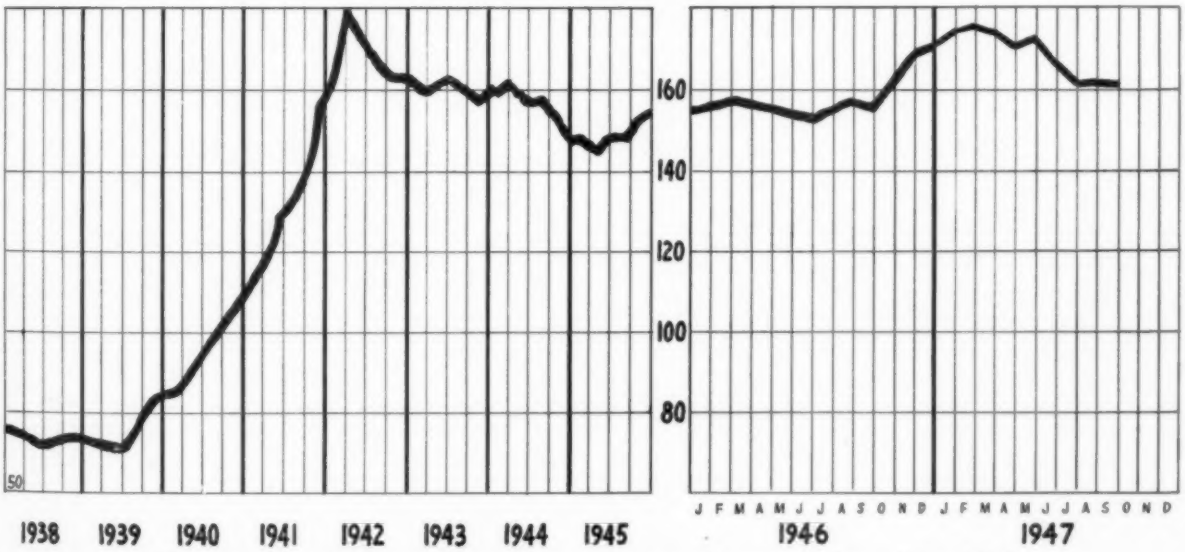
Major bromides, namely soda, potash and ammonia, have been advanced 3c per pound because of increasing costs. The new prices to contract consumers became effective October 1st, while the higher spot prices became effective when announced. Bromides are used in photography, organic chemicals, in medicine and engraving. Ammonium bromide is quoted up to 31c per pound in 450 pound barrels, and 32c per pound in 100 pound drums.

Olive Oil Firm

Reports of increased Italian olive oil production and statements calling attention to an easing of the Mediterranean olive oil supply situation attracted considerable attention in spot olive oil circles.

However, there was no special easing of the price basis here, with sellers quoting Spanish oil at $6.20 to $6.30, drums, duty paid. There were also reports that this steadiness was attributed largely to the light stocks and the fact that there can be no improvement until after the first of the year. New crop Spanish olive oil offers will be available in that country then, and some interests feel that there may be a change in the attitude toward exports from there by that time.

50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for September declined fractionally from 162.9 to 162.6.

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Theobromine alkaloid 50c

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Tolu 45c
Benzoin gum Sumatra 5c
Bois de Rose Braz. 50c
Burdock root 3c
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Cananga oil Rect. $2.65
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Eugenol 5c
Fennel oil 70c
Gamboge gum 55c
Geraniol 10c
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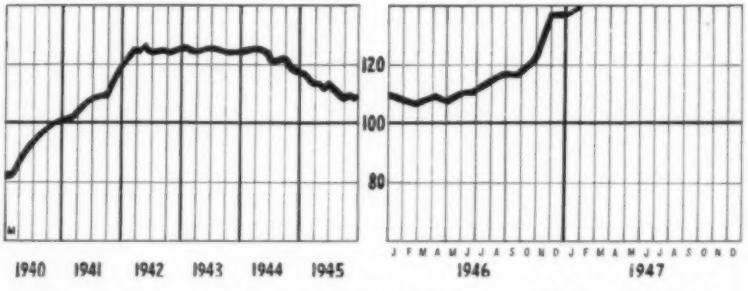
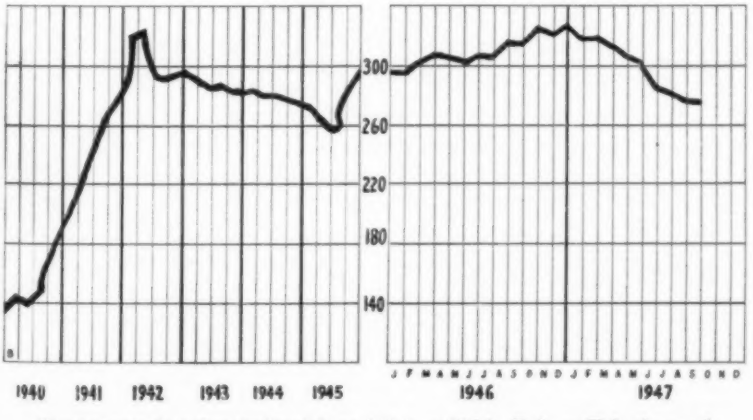
Goldenseal root 40c
Hemlock oil 10c
Hydroxycitronellal 25c
Indol 50c
Lavender oil 50c
Lavender Spike oil 25c
Manna small 5c
Mercury $3
Methyl cinnamate 7c
Oleoresin capsicum 10c
Pine needle oil 40c
Rose oil Bulg. $2
Rue oil 25c
Saffron Valencia $1
Safrol 5c
Senega root 75c
Spearmint oil $1.25
Spruce oil 10c
Stearic acid TP 5½c
Tragacanth gum No. 1 15c

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinals index advanced slightly from 167.7 to 168.6. Menthol and Potassium Bromide were up; mercury declined to $81.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined from 285.3 to 284.9. Balsam Tolu dropped from $3.45 to $3.

Mercury Competitive

Foreign competition by a two-nation mercury cartel has brought the domestic industry to "the verge of extinction," a Congressional subcommittee was told.

S. H. Williston, vice president and general manager of the Cordero Mining Co., Nevada mercury producer, testified that an Italian-Spanish cartel, controlling most of the foreign mercury production, was dumping the metal on the domestic market at New York prices below domestic cost. Williston said he and other witnesses, including Herbert Witt of Oregon and Idaho, and Worthen Bradley and Gordon Guld of California, comprised 98 percent of the operators of the nation's mercury mines.

Output of mercury dropped seven percent during the second quarter of this year to a total production of 5,700 flasks, the Bureau of Mines reported. Production during the first quarter of the year totaled 6,100 flasks.

Production, the bureau reported, continued well above prewar levels but imports fell to the lowest level since the third quarter of 1941.

Consumption also declined but was substantially above domestic production although not in excess of production plus imports.

Spanish interests in an effort to recapture her share of the United States mercury market, have been steadily lowering prices for imported material, industry observers state.

If they can get the price down to a level where they are underselling United States mines, industry observers point out, Spain hopes for a large export gain.

This trend is born out by steadying declining prices which have accrued during the past eighteen months. In January 1946 mercury was selling for $103.82 per flask at New York. In June of this year it sold for $84.74 per flask while the present price is $81 per flask.

In May Mercuric Europe reduced its export price of mercury by $14.50 to the basis of $65 at Spanish or Italian ports. The British price was likewise reduced.

Consumption of mercury during the

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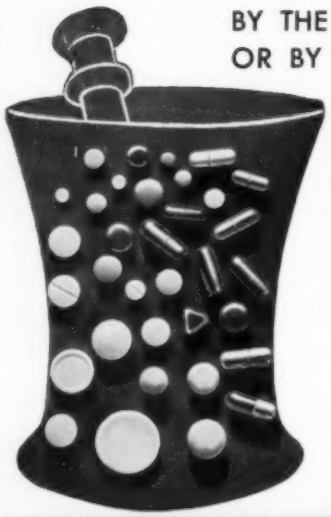

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April to June, 1947 period totaled 7,800 flasks, the bureau reported, while imports totaled 1,084 flasks. The import figure is in sharp contrast with the 4,190 flasks brought into this country during the January to March, 1947 period.

Stocks in metals reserve at the end of June totaled 19,900 flasks, while consumers and dealers held 18,200 flasks and producers 2,087 flasks. Total stocks were approximately the same for the second quarter as during January to March period, the bureau said.

Glycerin Firm

A good demand is noted for glycerin for the account of foreign and domestic buyers. Some exporters, while having a license, are reported endeavoring to cover here on their ability to complete exchange arrangements later on.

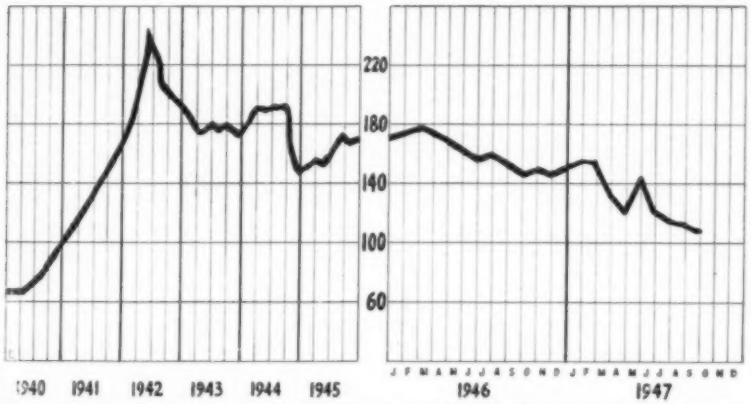
Statistically it is of interest to note the current stocks of crude glycerin on hand July 31, 1947, amounting to 48,767,000 pounds, were only 53 percent of what they were on July 31, 1944, the heaviest production year in the history of the industry, when the output amounted to 199,835,000 pounds of which 102,130,000 pounds had been produced in the first six months of that year. If production in 1944 continued at the same rate as in the first half of the period, the year's output would have reached 204,260,000 pounds. Under the circumstances some trade factors believe that this year's trend in output will be all probability follow the 1944 pattern by declining in the closing months.

A factor to consider in predicting the future trend of glycerin prices is the fact that synthetic glycerin production is only several months away. It is quite likely that major refiners will endeavor to keep prices down in anticipation of greater competitive conditions that may arise as the result of a decided increase in the available supply.

Streptomycin

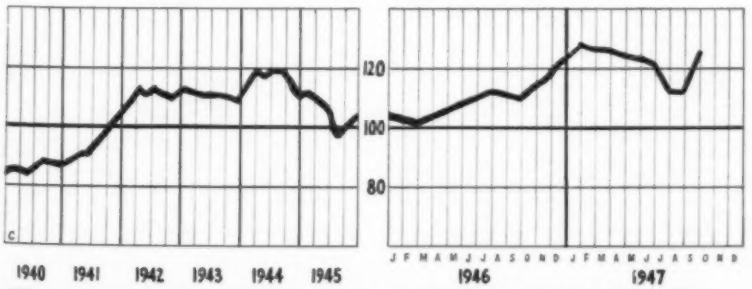
Streptomycin production in August totaled 873,449 grams, the Office of Domestic Commerce reported. Exports up to 400,000 grams will be authorized during September, the Department of Commerce said. The export quota was set after consideration of prospective production, and of domestic distribution and inventory situations.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index declined from 121.3 to 117.8. Bois de rose, Cassia, Citronella, Clove, Lavender, and Rose were lower. Sandalwood advanced slightly.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index advanced sharply from 96.9 to 125.3. Borax, menthol, stearic acid, and gum Tragacanth were all materially higher.

Menthol Higher

Natural menthol came in for a wider and more active consuming request and by the close of the trading period quotations had risen to a range of from $8.75 to $9.00 per pound. Opinion differed as to the future of the market, some thinking the advance would continue while others felt that after a period of higher levels, quotations would sink and seek stabilization around $8.00 per pound.

Rose Oil Situation

A government monopoly, under national control, has taken over the entire rose oil industry in Bulgaria, which is the world's largest producer of this oil. Purchase and sale may be conducted only by the government and although many of the twenty four large distilling plants are nominally owned by individuals, they are actually under government direction according to United States government information.

Rose oil production in 1946 was reported at only 794 kilograms, or about one-fifth of the 1939 output. The amount produced this year is expected to be even lower. Frost and drought in the spring of this year contributed to the decline and some reliable sources predict a total production of only 500 to 600 kilograms for the entire year.

During the war there was little activity in the rose oil industry. The wartime policy caused a shift of production from roses to food and medicinal crops. From 1941 to 1943, rose oil exports were prohibited, and limitations were placed on the amount of oil an individual could purchase domestically. In 1946 the total hectarage was 2,810, as compared with the 1939 figure of 6,338 hectares.

Prices of the oil, in terms of the Bulgarian leva, have increased tremendously during the last few year, although the value of the leva has, of course, declined with the increased costs of living and production. The competition brought about by synthetics, as well as the existence of large stocks of the oil, have tended to produce an unfavorable outlook for the industry. Of the entire hectarage in 1946, only 46 hectares were in newly planted bushes, compared with 108 hectares in 1939. Although some increase in planting has taken place, it is still not sufficient to match the rate of abandonment of old gardens.

While rose oil has been considered almost a Bulgarian monopoly, some offerings have been made by Turkey and the U.S.S.R. This development, in the Caucasus and Crimean regions of the U.S.S.R. was aided by the export of rose bushes from Bulgaria.

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California Branch--339 East 2nd Street
LOS ANGELES, CALIF.

FINE AROMATIC CHEMICALS
ESSENTIAL OILS and COMPOUNDS

Aromatics Division
GENERAL DRUG COMPANY
125 Barclay St., New York 7, N. Y.
9 S. Clinton Street, Chicago 6
1019 Elliott Street, W., Windsor, Ont.
AROMATICS DIVISION

Your Trade-Mark Record

(*Continued from page 517*)

OBAY—VI—H—508,614
The Pharma-Craft Corp., New York, N. Y.
Ser. Sept. 6, 1946 D. U. July 31, 1946
ODOLOST—VI—D—510,191
Lee Nusbaum (Pennsylvania Engineering Co.), Phila., Pa.
Ser. Oct. 3, 1946 D. U. Sept. 18, 1946
OROSET—IV—M—508,810
Onyx Oil & Chemical Co., Jersey City, N. J.
Ser. Sept. 10, 1946 D. U. Aug. 7, 1946

P-40—VI—M—499,072
Plant Products Corp., Blue Point, N. Y.
Ser. Mar. 27, 1946 D. U. Feb. 23, 1945
PENETROIL—VI—M—467,166
Plough, Inc., Memphis, Tenn.
Ser. Feb. 4, 1944 D. U. Jan. 1, 1914
PENNSALT—VI—T—509,532
The Pennsylvania Salt Manufacturing Co., Philadelphia, Pa.
Ser. Sept. 21, 1946 D. U. Apr. 22, 1946
PEST-B-GON—VI—T—490,738
California Spray-Chemical Corp., Wilmington, Del.
Ser. Oct. 30, 1945 D. U. July 27, 1933
PIERRE DUNE—VI—BC—505,012
Edmond Rosens, Paris, France
Ser. July 2, 1946 D. U. May 31, 1939
Reg. 431,151 July 8, 1947
PITS—VI—CDE—496,887
Command. Vennootschap Chem. Fab. Rids, Ijmuiden, Holland
Ser. Feb. 19, 1946 D. U. Nov. 29, 1940
PLAY (with des.)—VI—C—507,863
Louis A. Stearn (Las), Los Angeles, Calif.
Ser. Aug. 22, 1946 D. U. Mar. 15, 1946
POMPADOUR—VI—C—475,781
John T. Stanley Co., Inc., New York, N. Y.
Ser. Oct. 27, 1944 D. U. Nov. 1, 1941
POND'S (with des.)—VI—C—480,378
Pond's Extract Co., New York, N. Y.
Ser. Mar. 1, 1945 D. U. Aug. 18, 1941
POST OFFICE RED—VI—CE—508,777
Avon Products, Inc., New York, N. Y.
Ser. Sept. 10, 1946 D. U. May 10, 1946
POUTING—VI—BC—508,421
Kay Daumit, assignor to Kathryn, Inc., Chicago, Ill.
Ser. Sept. 3, 1946 D. U. July 24, 1945
PRIMABSOLUE—VI—M—511,905
S. A. Des Etabl. Roure-Bertrand Fils Et. Justin Dupont, Paris, France
Ser. Nov. 1, 1946 D. U. May 24, 1923

QUINOTINE—VI—TM—508,231
Monsanto Chemical Co., St. Louis, Mo.
Ser. Aug. 29, 1946 D. U. Aug. 10, 1946
QUEAL—(with des.)—VI—CS—505,501
Lenni Labs., Philadelphia, Pa.
Ser. July 12, 1946 D. U. May 15, 1946
QUTIN—VI—T—509,924
Cutin Labs., Cranford, N. J.
Ser. Sept. 28, 1946 D. U. Aug. 12, 1945

R (with des.)—VI—B—506,843
Soc. D'Etudes Et D'Exp. De La Parfum. De Luxe, Paris, Fr.
Ser. Aug. 3, 1946 D. U. March 1943
RATTAN—IV—AI—508,002
Sherman Perr, Newark, N. J.
Ser. Aug. 24, 1946 D. U. June 29, 1946
RATTAN—VI—BCDI—508,001
Sherman Perr, Newark, N. J.
Ser. Aug. 24, 1946 D. U. June 29, 1946
RECORD—(with des.)—VI—BCHK—491,428
Durite Corp., Detroit, Mich.
Ser. Nov. 8, 1945 D. U. Oct. 15, 1945
REVE FLEURI—VI—B—481,435
Saenz, Briones & Cia., Buenos Aires, Argentina
Ser. Mar. 28, 1945 D. U. Oct. 13, 1931
ROLLICKING—VI—BC—508,419
Kay Daumit, assignor to Kathryn, Inc., Chicago, Ill.
Ser. Sept. 3, 1946 D. U. July 24, 1945
RUDELLES—VI—M—486,504
Rudelle Labs., Chicago, Ill.
Ser. July 30, 1945 D. U. 1918

SANTOTINE—VI—T—505,974
Monsanto Chemical Co., St. Louis, Mo.
Ser. July 20, 1946 D. U. July 10, 1946
SECO—IV—M—498,863
Seco Products Co., Toledo, Ohio
Ser. Mar. 23, 1946 D. U. January 1946
SHAVE 'N SHOWER—VI—BCDFHIK—492,716
La Mode Chez Tappe, Inc., New York, N. Y.
Ser. Dec. 5, 1945 D. U. Oct. 25, 1945
Reg. 430,845 June 24, 1947
SILANEAL—VI—M—503,980
Dow Corning Corp., Midland, Mich.
Ser. June 15, 1946 D. U. February, 1945
SKIL—VI—T—500,072
Gallowhur Chemical Corp., New York, N. Y.
Ser. Apr. 12, 1946 D. U. Jan. 23, 1946
SMOOSH—IV—AM—507,151
Smoosh Mfg. Co., Los Angeles, Calif.
Ser. Aug. 9, 1946 D. U. July 15, 1946
SPRITZ—VI—T—495,553
Monarch Chemical Co., New Orleans, La.
Ser. Jan. 28, 1946, D. U. Oct. 8, 1945
SPRUCE—VI—C—496,747
Allen B. Wrisley Co., Chicago, Ill.
Ser. Feb. 16, 1946 D. U. June 1942
Reg. 431,134 July 8, 1947
STARLAC—VI—E—508,080
Wm. R. Whittaker Co., Ltd., Los Angeles, Calif.
Ser. Aug. 26, 1946 D. U. Aug. 20, 1946
STORY BOOK RED—VI—CE—510,758
Avon Products, Inc., New York, N. Y.
Ser. Oct. 12, 1946 D. U. Sept. 19, 1946
STYLE KING—VI—ABDI—486,750
S. Buchsbaum & Co., Chicago, Ill.
Ser. Aug. 6, 1945 D. U. Mar. 2, 1943
SULFO-LO—VI—M—499,931
Wharton Pharmacal Co., Gadsden, Ala.
Ser. Apr. 9, 1946 D. U. June 3, 1935
SUPER-TEX—VI—T—507,158
Tex Products, Inc.,Newark, N. J.
Ser. Aug. 9, 1946 D. U. July 12, 1946
SWEL—IV—AM—508,338
Swel Products Co., Salt Lake City, Utah
Ser. Aug. 30, 1946 D. U. July 7, 1946

TENDRE ACCORD—VI—BC—510,543
Robert Leurent Parfumer, S. A. R. L., Paris, France
Ser. Oct. 9, 1946 D. U. July 26, 1944
THIOVANOL—VI—M—495,461
Evans Chemetics Inc., New York, N. Y.
Ser. Jan. 26, 1946 D. U. Aug. 9, 1945
THREE CHEERS—VI—M—512,493
Elgin Labs., Inc., New York, N. Y.
Ser. Nov. 13, 1946 D. U. June 18, 1946
TOBISAL—VI—T—502,764
The New York Quinine And Chemical Works, Inc., Brooklyn, N. Y.
Ser. May 25, 1946 D. U. May 7, 1946
TRANSGLO—IV—M—507,041
Calgon, Inc., Pittsburgh, Pa.
Ser. Aug. 8, 1946 D. U. Aug. 2, 1946
TRISANITE—IV—M—507,687
Oakite Products, Inc., New York, N. Y.
Ser. Aug. 20, 1946 D. U. July 31, 1946
TRUINE TEST TELL—VI—CH—506,668
Mamie Lampkin Jones, Atlanta, Ga.
Ser. Aug. 1, 1946 D. U. Aug. 9, 1946
TUMBLIN TIM—IV—M—508,279
General Shoe Corp., Nashville, Tenn.
Ser. Aug. 30, 1946 D. U. Feb. 14, 1946

VIC-CHAR—VI—H—511,915
Vic-Char Chemical Co., Minneapolis, Minn.
Ser. Nov. 1, 1946 D. U. July 1, 1925
VITAMOL—VI—C—511,555
Inter-Hamol S. A. Zurich, Switzerland
Ser. Oct. 26, 1946 D. U. 1935

WDB-50—VI—T—492,513
The Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
Ser. Dec. 1, 1945 D. U. July 26, 1945
W.L.G.—IV—M—507,872
Wyandotte Chemical Corp., Wyandotte, Mich.
Ser. Aug. 22, 1946 D. U. Mar. 8, 1938
WESTERNER—VI—I—509,114
M. C. Wentz (M. C. Wentz Co.), Pasadena, Calif.
Ser. Sept. 14, 1946 D. U. Aug. 26, 1946
WESTWARD HO—VI—I—509,117
M. C. Wentz (M. C. Wentz Co.), Pasadena, Calif.
Ser. Sept. 14, 1946 D. U. Aug. 26, 1946
WHITEMARK—VI—H—509,119
Peter G. White, (Whitemark Drug Co.), New York, N. Y.
Ser. Sept. 14, 1946 D. U. Aug. 28, 1946

WHITE TAR—VI—M—503,579
Koppers Company, Inc., Kearny, N. J.
Ser. June 10, 1946 D. U. 1918
WINGZOL—IV—AM—503,107
Nolan C. Lovell (The Wingzol Soap Co.), Birmingham, Ala.
Ser. May 31, 1946 D. U. July 1930

YOUTHCRAFT—VI—A—501,676
John W. Murphy (Murphy Labs.), Upper Darby, Pa.
Ser. May 8, 1946 D. U. April 1944

ZALBEN—VI—T—508,968
Boyle and Co., Los Angeles, Calif.
Ser. Sept. 13, 1946 D. U. June 6, 1940

The Trade-Marks listed here are dated July 29, 1947 through August 12, 1947 inclusive.

ACNOMEL—VI—M—510,449
Smith, Kline & French Labs., Philadelphia, Pa.
Ser. Oct. 8, 1946 D. U. Sept. 11, 1946
ARDENA CELLULAR CREAM—VI—C—484,994
Elizabeth Arden Sales Corp., New York, N. Y.
Ser. June 25, 1945 D. U. July 12, 1938
Reg. 431,994 Aug. 12, 1947
AVEU—VI—ABC—508,859
Roger & Gallet, New York, N. Y.
Ser. Sept. 11, 1946 D. U. Aug. 30, 1946

BABYSUDS—IV—M—506,716
R. F. Willey (Georgie Porgie Co.), Council Bluffs, Iowa
Ser. Aug. 1, 1946 D. U. Feb. 20, 1946
Reg. 431,701 July 29, 1947
BEGUINE—IV—AI—510,781
Golden Arrow Toiletries, New York, N. Y.
Ser. Oct. 12, 1946 D. U. Oct. 1, 1946
BEST DRESS—VI—C—493,597
Richard Hudnut, New York, N. Y.
Ser. Dec. 20, 1945 D. U. Nov. 16, 1945
BIROME—VI—ABCE—508,643
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Sept. 7, 1946 D. U. Sept. 3, 1946
BRINSE—VI—M—515,859
Bricide Corp., Chicago, Ill.
Ser. Jan. 17, 1947 D. U. Jan. 10, 1947

CACHUCHA—VI—BC—509,209
G. Rene Duval (Parfums Volnay), Suresnes, Fr.
Ser. Sept. 17, 1946 D. U. May 1937
CHAL-YON—VI—T—514,327
Chal-Yon Corp. (Christie & Albion), Boston, Mass.
Ser. Dec. 16, 1946 D. U. April 1946
CHEMI-TROLL—VI—T—508,030
Chemi-Troll Prod., Gibsonburg, Ohio
Ser. Aug. 26, 1946 D. U. Jan. 15, 1946
CLAIROXIDE—VI—M—508,798
Clairol Inc., Stamford, Conn.
Ser. Sept. 10, 1946 D. U. June 1944
CLOUDSTONE—VI—ABCE—515,251
Associated Prod., Inc., Chicago, Ill.
Ser. Jan. 4, 1947 D. U. Nov. 27, 1946
COLOR CLUSTER—VI—CE—505,794
Avon Products, Inc., New York, N. Y.
Ser. July 18, 1946 D. U. Apr. 10, 1946
Reg. 432,035 Aug. 12, 1947

DXI (with des.)—IV—M—509,998
J. O. Safford (Safford Co.), Tryon, N. C.
Ser. Sept. 30, 1946 D. U. August 1945
DECOLLETE—VI—BC—506,897
Rolley, Inc., San Francisco, Calif.
Ser. Aug. 5, 1946 D. U. Nov. 2, 1945
DERMYCIN—VI—T—514,326
Chal-Yon Corp., Boston, Mass.
Ser. Dec. 16, 1946 D. U. Sept. 21, 1946
DEXLAVE—IV—M—506,463
H. O. Mattos (Michael's Hair Prod. Co.), Brooklyn, N. Y.
Ser. July 29, 1946 D. U. Apr. 6, 1946
DIVOBAN—VI—T—514,528
The Diversey Corp., Chicago, Ill.
Ser. Dec. 19, 1946 D. U. Nov. 26, 1946
DONNA LYNN—VI—C—502,610
Advertising Arts Corp., New York, N. Y.
Ser. May 23, 1946 D. U. May 9, 1946
Reg. 432,019 Aug. 12, 1947

DOUBLE DARE—VI—B—500,960
Kay Daumit (Kathryn, Inc.), Chicago, Ill.
Ser. Apr. 26, 1946 D. U. Jan. 10, 1942
DUEL—VI—BC—518,388
Leonid de Lesinskis, New York, N. Y.
Ser. Mar. 3, 1947 D. U. Jan. 10, 1946
DURASET—VI—M—513,673
Monsanto Chemical Company, St. Louis, Mo.
Ser. Dec. 4, 1946 D. U. Oct. 10, 1946

EASYDO—VI—H—407,809
Easydo, Inc., Chicago, Ill.
Ser. Aug. 22, 1946 D. U. Aug. 12, 1946
ESSELIP—VI—M—511,511
Sharp & Dohme, Inc., Philadelphia, Pa.
Ser. Oct. 25, 1946 D. U. Oct. 10, 1946
ETERNAL TRIANGLE—VI—B—475,300
Louis J. Misuraca, Glendale, Calif.
Ser. Oct. 13, 1944 D. U. Sept. 22, 1944
EYE-Q—VI—C—494,813
Joseph A. Buttny (The JAB Co.), Chicago, Ill.
Ser. Jan. 16, 1946 D. U. Dec. 7, 1945

HANDORMON—VI—C—511,270
Elysee Cosmetic Mfg. Co., San Francisco, Calif.
Ser. Oct. 22, 1946 D. U. June 1943

IOSEC—VI—F—507,058
Iosec Products, Inc., New Brunswick, N. J.
Ser. Aug. 8, 1946 D. U. Aug. 2, 1946

JEUX D'AMOUR—VI—B—509,400
J. Crespin & M. Laurens-Frings & Cie. (Zofaly), Paris, Fr.
Ser. Sept. 20, 1946 D. U. Apr. 30, 1946

KALUK—IV—M—506,533
Herbert M. Koehler (Kaluk Prod. Co.), Rochester, N. Y.
Ser. July 30, 1946 D. U. June 1936
KAMENOL—IV—A—509,427
Kamen Soap Products Co., New York, N. Y.
Ser. Sept. 20, 1946 D. U. Sept. 1, 1946
KRY-O-CIDE C—VI—T—493,692
The Pennsylvania Salt Mfg. Co., Philadelphia, Pa.
Ser. Dec. 21, 1945 D. U. Feb. 20, 1945

LADY STANLEY—VI—C—505,776
Stanley Home Prod. Inc., Westfield, Mass.
Ser. July 17, 1946 D. U. June 3, 1946
Reg. 431,797 Aug. 5, 1947
LEISURE—IV—A—509,087
Fred J. Frederick (Frederick Soap & Chemical Co.), Los Angeles, Calif.
Ser. Sept. 14, 1946 D. U. Mar. 15, 1946
LITTLE SHAVER—VI—DKI—502,276
Lillian Cooper Cosmetics, Ltd., New York, N. Y.
Ser. May 17, 1946 D. U. May 1, 1946
LORD CALVERT (with des.)—VI—I—506,816
Irresistible, Inc., New York, N. Y.
Ser. Aug. 3, 1946 D. U. June 5, 1946
LUSTRAY—VI—H—514,043
Iris Beauty Prod., Brooklyn, N. Y.
Ser. Dec. 11, 1946 D. U. July 31, 1946

MADDENING—VI—BCEFH—513,876
Consolidated Cosmetics, Chicago, Ill.
Ser. Dec. 7, 1946 D. U. Nov. 16, 1946
MARTHA LEE (with des.)—VI—BC—504,186
Martha Lee, Inc., Waco, Tex.
Ser. June 19, 1946 D. U. Apr. 19, 1946
Reg. 432,029 Aug. 12, 1947
MARTHA LEE (with des.)—VI—C—504,187
Martha Lee, Inc., Waco, Tex.
Ser. June 19, 1946 D. U. Apr. 19, 1946
Reg. 432,030 Aug. 12, 1947
MARTHA LEE (with des.)—VI—C—504,565
Martha Lee, Inc., Waco, Tex.
Ser. June 25, 1946 D. U. Apr. 19, 1946
Reg. 432,031 Aug. 12, 1947
MARTIN'S 4 L's (with des.)—VI—H—505,973
Martin Beauty Products Co., New York, N. Y.
Ser. July 20, 1946 D. U. Apr. 9, 1946
Reg. 432,036 Aug. 12, 1947
MAYFAIR—VI—BC—481,650
Saenz, Briones & Cia., Buenos Aires, Arg.
Ser. Apr. 2, 1945 D. U. Nov. 28, 1940
MECHANIX—IV—A—486,817
Walter E. Schultz (The Schultz Labs.), Boone, Iowa
Ser. Aug. 6, 1945 D. U. Apr. 14, 1944
Reg. 431,995 Aug. 12, 1947

MORR—VI—C—495,681
Moyer Chemical Co., Chicago, Ill.
Ser. Jan. 30, 1946 D. U. Jan. 15, 1946
Reg. 432,003 Aug. 12, 1947

NEON RED—VI—CE—515,027
Floress Company, Chicago, Ill.
Ser. Dec. 30, 1946 D. U. March 1944

PALMOLIVE—VI—H—501,564
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Sept. 23, 1946 D. U. Aug. 13, 1946
PERFUMOR—VI—M—498,822
BIC Manufacturing Corp., New York, N. Y.
Ser. Mar. 23, 1946 D. U. Mar. 18, 1946
Reg. 432,008 Aug. 12, 1947
PURSIZE—IV—M—509,171
Soil Off Mfg. Co., Glendale, Calif.
Ser. Sept. 18, 1946 D. U. July 1, 1946

REFRESCO—VI—K—504,380
Dominick J. Nicoletti (The Refresco Co.), New Rochelle, N. Y.
Ser. June 21, 1946 D. U. Nov. 10, 1945
ROU-SEI—VI—C—496,167
Rose Sadie Sataloff (Rou-Sei Cosmetics), New York, N. Y.
Ser. Feb. 7, 1946 D. U. Feb. 21, 1945

SALLY STAUFFER—VI—ABCE—508,318
B. H. Stauffer (B. H. Stauffer Research Lab.), Los Angeles, Calif.
Ser. Aug. 30, 1946 D. U. Jan. 22, 1946
Reg. 432,047 Aug. 12, 1947
SANITOR—VI—T—508,764
West Disinfecting Co., Long Island City, N. Y.
Ser. Sept. 9, 1946 D. U. 1912
SECRET GARDEN—VI—B—516,576
Helena Rubinstein, Inc., New York, N. Y.
Ser. Jan. 29, 1947 D. U. Dec. 20, 1946
SERMAIZE—VI—B—507,840
Parfums Verlayne, S. A. R. L., Paris, Fr.
Ser. Aug. 22, 1946 D. U. Mar. 15, 1945
SHIP-SHAPE—IV—M—509,942
Maurice King (King Prods. Co.), Brooklyn, N. Y.
Ser. Sept. 28, 1946 D. U. July 1946
SIX-TWELVE—VI—T—506,419
Carbide & Carbon Chemicals Corp., New York, N. Y.
Ser. July 29, 1946 D. U. July 13, 1946
SOROLENE—IV—M—508,809
Onyx Oil & Chemical Co., Jersey City, N. J.
Ser. Sept. 10, 1946 D. U. Aug. 7, 1946
SPLIT-SECOND—IV—M—510,101
The Morton S. Pine Co., Cleveland, Ohio
Ser. Oct. 2, 1946 D. U. Nov. 20, 1945
SPRINT—VI—T—510,911
Whitehall Pharmacal Co., New York, N. Y.
Ser. Oct. 15, 1946 D. U. July 12, 1946
STANLEY (with des.)—VI—K—498,463
Stanley Home Products, Inc., Westfield, Mass.
Ser. Mar. 18, 1946 D. U. October 1944
Reg. 431,786 Aug. 5, 1947
STYLE—VI—B—514,756
Etablissements Rigaud, Inc., New York, N. Y.
Ser. Dec. 24, 1946 D. U. Dec. 20, 1946
SULKA—VI—H—487,135
Joubert Cie., Inc., New York, N. Y.
Ser. Aug. 14, 1945 D. U. May 18, 1945
Reg. 431,996 Aug. 12, 1947
SUPERTONE—VI—T—515,655
California Spray-Chemical Corp., Wilmington, Del.
Ser. Jan. 13, 1947 D. U. Nov. 27, 1946
SURE FIRE RED—VI—CE—509,687
Avon Prods., Inc., New York, N. Y.
Ser. Sept. 25, 1946 D. U. Sept. 3, 1946
SURGA-HAN—IV—M—499,411
Hillyard Chemical Co., St. Joseph, Mo.
Ser. Apr. 1, 1946 D. U. March 1945
SURPRISE—VI—BC—510,763
Consolidated Cosmetics, Chicago, Ill.
Ser. Oct. 12, 1946 D. U. Sept. 21, 1946
SYLVIOLA—VI—M—515,163
The Dow Chemical Co., Midland, Mich.
Ser. Jan. 2, 1947 D. U. Dec. 18, 1946

TEC—VI—M—506,847
Tennessee Eastman Corp., Kingsport, Tenn.
Ser. Aug. 3, 1946 D. U. Jan. 1, 1933
THALL'S—VI—M—507,759
David Thall (Thall's Home Remedies), Manchester, N. H.
Ser. Aug. 21, 1946 D. U. Jan. 15, 1929
Reg. 432,044 Aug. 12, 1947

U-2—VI—D—515,189
McDonough Lewy, Inc., Cleveland, Ohio
Ser. Jan. 2, 1947 D. U. Nov. 27, 1946

VICTORIAN KEEPSAKE—VI—B—481,267
Bonwit Teller, Inc., New York, N. Y.
Ser. Mar. 24, 1945 D. U. Nov. 28, 1944
VOIX DE FRANCE—VI—BC—509,819
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Sept. 27, 1946 D. U. Sept. 10, 1946
VOIX DE LA FORET—VI—BC—510,060
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Oct. 2, 1946 D. U. Sept. 10, 1946
VOIX DE PARIS—VI—BC—509,821
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Sept. 27, 1946 D. U. Sept. 10, 1946
VOIX DU CIEL—VI—BC—510,059
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Oct. 2, 1946 D. U. Sept. 10, 1946
VOIX DU COEUR—VI—BC—510,058
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Oct. 2, 1946 D. U. Sept. 10, 1946

WAYKEN—VI—C—512,489
Dearborn Supply Co., Chicago, Ill.
Ser. Nov. 13, 1946 D. U. June 1946
WETHERHOLT—VI—AB—490,729
Wetherholt's Perfume Co., Chicago, Ill.
Ser. Oct. 20, 1945 D. U. Sept. 16, 1941
Reg. 432,000 Aug. 12, 1947

XANDRA—VI—ABM—482,532
Maurice Handman (Maurella Prod.), New York, N. Y.
Ser. Apr. 24, 1945 D. U. Jan. 1, 1937

YOLANDE—VI—B—498,624
Genesee Trading Co., Inc., New York, N. Y.
Ser. Mar. 20, 1946 D. U. Feb. 7, 1946

ZEEP—IV—A—509,863
The Minnesota Chemical Co., St. Paul, Minn.
Ser. Sept. 27, 1946 D. U. Apr. 1, 1946
ZYLIUM-VI—T—506,788
Tykor Prods. Inc., New York, N. Y.
Ser. Aug. 2, 1946 D. U. Apr. 17, 1945

1190—VI—B—491,252
Dermetics, Inc., New York, N. Y.
Ser. Nov. 8, 1945 D. U. Oct. 13, 1945

The following unregistered mark has been submitted by the owners thereof for publication in this column:
SHANGHAI—VI—ABCH
Lentheric, Inc., New York, N. Y.
D. U. June 5, 1937

The Trade-Marks listed here are dated August 19, 1947 through September 16, 1947 inclusive.

10-2-1—VI—E—517,208
Edward M. Spitz (Te-Riff Co.), Los Angeles, Calif.
Ser. Feb. 8, 1947 D. U. Jan. 21, 1947
308—VI—H—512,435
Locke Chemical Company, Baltimore, Md.
Ser. Nov. 12, 1946 D. U. 1926
622—VI—T—511,320
Dodge & Olcott, Inc., New York, N. Y.
Ser. Oct. 23, 1946 D. U. July 9, 1946

AERO-PED—VI—T—512,224
Aero-Ped Limited, London, England
Ser. Nov. 8, 1946 D. U. 1939
AFTER HOURS—VI—B—501,009
Nettie Rosenstein, Inc., New York, N. Y.
Ser. Apr. 26, 1946 D. U. Apr. 23, 1946
ALL'N 1—VI—A—521,799
Continental Soap Corp., Chicago, Ill.
Ser. May 3, 1947, D. U. Dec. 21, 1946
ALMA RAYE—VI—BC—501,949
Alma Raye Cosmetic Co., Los Angeles, Calif.
Ser. May 13, 1946 D. U. October 1944
Reg. 432,159 Aug. 19, 1947
AMAMI (and des.)—VI—H—507,843
Prichard & Constance (Amami) Inc., Bloomfield, N. J.
Ser. Aug. 22, 1946 D. U. Jan. 2, 1927

AMBADUST—VI—C—512,324
Kay Daumit, Inc. (Kathryn, Inc.), Chicago, Ill.
Ser. Nov. 9, 1946 D. U. Mar. 1, 1946
AMOCO—IV—M—514,395
The American Oil Co., Baltimore, Md.
Ser. Dec. 17, 1946 D. U. July 2, 1946
ANAITIS—VI—BC—508,262
Biro, Meyne & Biro, Inc., New York, N. Y.
Ser. Aug. 30, 1946 D. U. Aug. 8, 1946
ANGEL CHOIR—VI—B—517,134
Richard Hudnut, New York, N. Y.
Ser. Feb. 7, 1947 D. U. Dec. 14, 1946
ANGELINE—VI—H—516,954
Marian Chamblis, Chicago, Ill.
Ser. Feb. 5, 1947 D. U. Dec. 1, 1945
APICAN—VI—M—524,601
The Drugs Product Co., Inc., Passaic, N. J.
Ser. June 21, 1947 D. U. Apr. 1, 1947
AQUAPELANT—VI—M—522,045
Ansbacher-Siegle Corp., Staten Island, N. Y.
Ser. May 7, 1947 D. U. Jan. 14, 1947
ARTRA—VI—AC—513,774
Schering Corporation, Bloomfield, N. J.
Ser. Dec. 5, 1946 D. U. Mar. 21, 1940
ATLANTIS—VI—B—513,121
Le Sonier, Inc., Boston, Mass.
Ser. Nov. 23, 1946 D. U. 1932

BB FOR TTT (and des.)—VI—H—516,813
Hal Collins Company, Dallas, Tex.
Ser. Feb. 3, 1947 D. U. October 1945
B-G-O—VI—T—506,496
Beeman's Laboratory, Inc., Atlanta, Ga.
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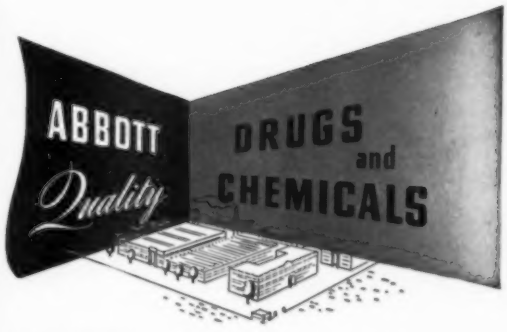

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A strictly vegetable hair oil can be made along the following lines:

Olive oil	45.00
Sweet almond oil	48.95
Castor oil	5.00
Parahydroxybenzoic acid ester	0.05
Perfume	1.00

Dissolve the parahydroxybenzoic acid ester and the perfume in the alcohol; then mix in the sweet almond oil. Mix the olive and castor oils and add the sweet almond oil mixture. Allow to stand for three days and filter.

A cream type of hair dressing can be made with an emulsifier, like diglycol stearate, as follows:

Diglycol stearate	10 parts
Castor oil	20 "
Almond oil	20 "
Water	70 "
Perfume	sufficient
Preservative	sufficient

ISOPROPYL BACK RUB: Some time ago, I do not recall whether it was in your publication or in the Journal of the American Medical Association, *I saw a formula for a rather simple back rub made with isopropyl alcohol. Could you supply this formula? Are there any legal restrictions on isopropyl alcohol, such as those for grain alcohol? Brooklyn.*

The formula for a back or athlete rub which you want has been published on several occasions both in the *J.A.M.A.* and *Drug & Cosmetic Industry*. This preparation consists of:

Isopropyl alcohol	25.0 CC.
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Acetic acid (4%)	2.5 "
Water, to make	100.0 "

Massage preparations based upon isopropyl alcohol are free of governmental restrictions. Several rulings have been made which serve to distinguish and overcome confusion between massages made with isopropyl alcohol and ethyl alcohol. The Food and Drug Administration recommends that the label should bear the phrase "Isopropyl Alcohol Rubbing Compound" rather than the phrase "Isopropyl Rubbing Alcohol Compound."

HAND LOTIONS AND CREAMS: We are planning to manufacture and market a hand cream and lotion for a specialized group. For our own particular merchandising purposes, this formula should include a California plant oil such as perhaps avacado oil or some similar local vegetable oil. Any suggestion along this line will be appreciated. Covina.

A hand lotion containing avacado oil can be made along the following lines:

Quince seed mucilage	5.0 parts
Karaya mucilage	5.0 "
Lanolin absorption base	5.0 "
Cetyl alcohol	3.0 "
Avacado oil	2.0 "
Glycerine	2.0 "
Alcohol	8.0 "
Distilled water	70.0 "
Preservative	0.1 "
Perfume	sufficient

A hand cream containing a vegetable oil, in which you could use avacado oil or any other vegetable oil, can be prepared along the following lines:

Absorption base	10.0
Lanolin	20.0
Vegetable oil	15.0
Cetyl alcohol	3.0
Water	52.0

The oil and fat ingredients, including the lanolin and absorption base, are melted together and allowed to cool to about 40° C. Water at this same temperature is added to the oils a little at a time, stirring thoroughly after each addition until the water is thoroughly incorporated.

SMELLING SALTS: I have checked through several sources, but I have not been able to find a formula for making smelling salts. I am particularly interested in the type which comes in the form cubes and is packaged in bottles. Any information you can give me concerning formulation, packaging and the like will be greatly appreciated. Milwaukee.

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Peptic Ulcer

(Continued from page 468)

tions on raw fruits and vegetables, it is common practice to provide additional quantities of ascorbic acid.[20-24] A recent study[27] has revealed that many patients with peptic ulcers have a totally inadequate dietary intake, particularly of ascorbic acid. The importance of ascorbic acid in nutrition and wound healing therefore makes it advisable that ulcer patients have adequate amounts of vitamin C included in their diets.

The frequent feeding of food with a high protein content is of value for at least two reasons. First, it maintains the nutrition of the patient. Second, it neutralizes the acid gastric juice.[14] It is common practice to combine frequent feedings with active antacid therapy, according to the principles first laid down by Sippy[28] in 1915. His regimen of three small meals daily, a mixture of milk and cream every hour on the hour, and antacid powders every hour on the half hour, is well known to every physician. In their original form Sippy antacid mixtures consisted of two powder mixtures. Powder I contained 0.6 Gm. each of magnesium oxide and sodium bicarbonate. Powder II consisted of 0.6 Gm. of bismuth subcarbonate and 2.0 to 3.0 Gm. of sodium bicarbonate. The powders were given alternately.

Because of certain disadvantages of the Sippy regimen, particularly the danger of alkalosis from the absorbable antacids,[21] many modifications in this method have been used, particularly with regard to the type of antacid employed.[24-26] Many doctors have found that diet alone, using the between-meals milk feedings, is often effective for controlling the symptoms. Nonetheless, antacids remain important if there are such factors as hyperacidity, hypersecretion, intractable symptoms, and poor response to dietary measures.

The type of antacid used to control gastric acidity is very important and many compounds and preparations have been used.[29] To simplify their discussion, Parson[24] divides antacids into four general groups. The first group, the alkaline antacids, are the oldest types and are represented chiefly by sodium bicarbonate, as in the Sippy powders. Such preparations are effective, but they are absorbable and alkalosis frequently develops from their use. In some cases, there is a marked rebound of gastric acidity after a transient neutralization. They also alkalize the urine and this may favor kidney stone formation. For these reasons the absorbable antacids are not as widely used as formerly. Nonetheless, for quick relief in single instances of ulcer pain, sodium bicarbonate remains a most effective agent.

The second group, the neutral antacids, are represented by tribasic calcium phosphate and tribasic magnesium phosphate. They are easily administered in capsules or in water, provide a prolonged neutralizing effect, are relatively non-toxic, have no undue constipating or laxative effects and are not absorbable. They

have proved very satisfactory for prolonged therapy.

The third group comprises the aluminum compounds such as colloidal aluminum hydroxide and aluminum phosphate. Aluminum hydroxide preparations have been extensively studied and many favorable reports on their efficacy have been published.[25-30] Colloidal aluminum hydroxide is non-toxic, non-absorbable and neutral. In addition to its efficient antacid action, it also produces an astringent and demulcent effect. However, this material may cause constipation in weak, elderly or severely ill patients. This tendency maybe combatted by adding heavy magnesium oxide and calcium carbonate to the evening dose of aluminum hydroxide gel.[31] A combination of colloidal aluminum hydroxide gel and magnesium hydroxide has also been found to avoid this disadvantage. It is said[32] that such a combination controls ulcer pain and heartburn with smaller and less frequent doses than are required with aluminum hydroxide gel alone. The preparation can be continued for a long time without danger of acid rebound, alkalosis or aggravation of constipation.

Aluminum hydroxide is also employed in the continuous drip method of therapy.[33-34] This procedure has been found to be of great service in the treatment of intractable cases of peptic ulcer and in some cases of massive hemorrhage.[24]

Reports on the effectiveness and advantages of aluminum phosphate gel in the treatment of peptic ulcers have also been published. In one such study,[35] it was found that this compound produces prompt relief of ulcer pain, had an excellent effect on appetite and return of strength, and was much less constipating than aluminum hydroxide gel.

Parson's fourth group of antacids is represented by magnesium trisilicate. The white tasteless compound is conveniently administered in tablet form or as a liquid suspension of the powder. Very effective as an absorbent, and providing prolonged antacid action, the drug is reported to be completely innocuous by mouth. In the stomach the drug forms a local adherent coating on the crater of an ulcer, thus permitting antacid action to be localized for more effective results.[30] Recently a combination of magnesium trisilicate, aluminum hydroxide and purified gastric mucin has been placed on the market in the form of a flavored, palatable tablet. The product is claimed to produce prompt relief coats the ulcer lesion and promotes healing.

Gastric mucin, obtained from hog stomach, has been used as an effective antacid, but its taste and odor have been major disadvantages in its wider employment.[30] Today it is classed as a useful adjuvant to other forms of peptic ulcer therapy.[8]

Despite the introduction of many new antacids, calcium carbonate (chalk) remains a favorite with a number of gastroenterologists.[9-14] Indeed, in the opinion of Travell,[26] "Calcium carbonate has probably proved to be the most effective single antacid." She feels that, despite certain disadvantages such as a tendency to constipate, it seems to best fit the description of an ideal antacid. In patients who are consti-

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pated a mixture of calcium carbonate and magnesium oxide may be more satisfactory than the calcium salt alone. Such a combination, flavored with a little oil of peppermint is used by Weintraub[26] in the ambulatory treatment of peptic ulcer. A somewhat similar preparation is recommended by Driscoll and Aaron.[9] This consists of:

Bismuth subnitrate	**30**
Light magnesium oxide	**20**
Prepared chalk	**60**

One teaspoonful of this powder in a quarter of a glass of water is taken three hours after the main meal.

Synthetic ion-exchange resins (Amberlite IR-4) have recently appeared as promising antacids for the treatment of peptic ulcer. Reports[36,37] on the use of these resins indicate that they are non-toxic and that they offer antacid action as effective as or superior to the preparations commonly prescribed. When employed in the proper mesh size and in suitable doses, these exchange resins act quickly without acid rebounds, do not disturb the mineral balance and do not cause diarrhea or constipation.

During the last few years considerable attention has been given to the use of amino acid preparations or protein hydrolysates in the treatment of peptic ulcer. Particularly important is the work done by Co Tui and his associates. In previous investigations they[38,39] had demonstrated that patients with gastric or duodenal ulcer are usually in a state of protein depletion. Since treatment with a high caloric and high amino acid mixture was found to have a favorable effect following gastrectomy, it was decided to try a similar course of therapy in the preoperative care of peptic ulcer cases.[40] Under such a regimen, most of the patients became free of pain and distress within 24 to 48 hours. An increase in strength and body weight was accompanied by rapid healing of the ulcer.

These impressive results led to further trials on a larger series of cases.[41] Treatment consisted of protein hydrolysate along with a carbohydrate (Dextri-Maltose). The intensive treatment is given in place of all food and is continued until the patient is pain-free for two weeks; after which treatment is gradually tapered off. In this group only 16 patients or almost 10 per cent failed to respond. One frequent untoward reaction was diarrhea. This was usually painless and easily controlled.

In discussing the possible means by which the protein hydrolysates caused prompt stoppage of pain and general inprovement, Co Tui said, "But whatever the cause of the prompt remission, we are dealing with a therapeutic substance which not only neutralizes the acid, relieves the stomach of digestive effort, but also furnishes the body with a rich source of nutriment with which body repair, including the healing of the ulcer, can take place." He stressed, however, that the prompt and dramatic remission may give a false sense of security which would be dangerous if it led to discontinuance of treatment. He also is of the opinion that this type of therapy should be given only to intractable cases, at

least until its value had been definitely established.

Many other investigators[42-46] have tested the efficacy of amino acid or protein hydrolysate therapy, and good results have been obtained in many cases. Evaluation of the method is still going on. The current status of the treatment is perhaps indicated in the statement by Hodges,[47] after a trial on 26 patients. In his opinion protein hydrolysate may become a useful adjunct to the management of peptic ulcer but, as now employed, it will not be a panacea.

There are those who believe that the endocrine glands play a role in the causation of peptic ulcer and that hormone preparations have a place in its therapy. Varying degrees of success have been obtained with the use of parathyroid extract,[48] posterior pituitary extract[49] and desoxycorticosterone acetate.[50]

Hormones from the gastrointestinal tract may also play an important role in the therapy of peptic ulcer. Interest in such compounds dates back to 1902, when Bayliss and Starling[51] discovered secretin. Since then, a number of other materials produced by the mucosa of the alimentary tract have been isolated and studied.[52] At present, major interest is being centered about enterogastrone,[53] sometimes called the peptic ulcer hormone.

As explained by Ivy,[1,54,55] who is doing considerable research on this substance, enterogastrone designates the chalone or hormonal agents which are responsible, in part at least, for the inhibition of gastric secretion and motility when adequate amounts of fat or sugar are ingested. Enterogastrone was purified and an assay method developed in 1937.[56] Later, Hands and his associates[57,58] reported that experimentally produced ulcers could be prevented with enterogastrone. In 1944, Ivy[54] published the results obtained with this hormone in the prevention of recurrent ulcers in 32 patients. Although favorable results were obtained, he felt at that time that enterogastrone therapy did not provide as rapid and complete relief as strict ulcer management.

In his latest report,[1] covering 58 patients receiving enterogastrone injections, good results were also obtained. An oral preparation made from the intestinal mucosa is being tried, but no data is yet available. Ivy still feels that no conclusions are warranted at present but that the findings are sufficiently encouraging to show that this method of attack on the problem of preventing peptic ulcer recurrence is worth further study.

In addition to enterogastrone from the intestinal mucosa, a similarly-acting substance has been extracted from urine. Sometimes referred to as urogastrone or G. S. D. (gastric secretory depressant), this substance also offers protection and resistance against the development of peptic ulcers.[59] In work done by Sandweiss and his co-workers,[60] the results of treatment with the urine extract were similar to those obtained with diet and alkalies. However, a more liberal diet was allowed and the extract-treated cases had less tendency toward relapses.

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tracts of stomach and small intestine. The stomach extract is used for treating gastric ulcer and the intestinal extract is given against duodenal ulcers. Out of 54 cases treated with these products, 44 showed good results as gauged by disappearance of symptoms and dimunition of the ulcer niche.[61] Also interesting are Morrison's[62] findings on the disappearance of peptic ulcer following feeding of gastric juice removed from normal subjects. Having obtained good results, this worker feels that a "protective principle" is elaborated within the gastric and duodenal mucous membranes and is secreted into the gastric juice. This principle may be lacking or impaired in ulcer patients, but it can be fed to them, causing the ulcers and symptoms to disappear.

A new angle of attack on peptic ulcers is offered in the use of synthetic detergents or surface active agents to inhibit the action of pepsin. It has long been known that pepsin as well as acid plays an important part in the etiology of gastric ulcer. Experimental studies[63] have shown that more severe ulcers are produced with acid and pepsin than with acid alone. Although considerable experimental work[64-70] has been done with sodium alkyl sulfate and sodium dodecyl sulfate, the findings are somewhat conflicting and further study seems needed. There are indications, however, that such compounds may prove useful, not only for depressing peptic activity, but also for stimulating mucus secretion, which is essential in the protective mechanism of the stomach.[71]

Peptic ulser, as such, is not a surgical disease. Ulcer therapy is principally medical; surgery being employed because of complications rather than because of the lesion itself. However, there are situations where surgical intervention is definitely indicated. Among these indications are perforation, stenosis (stricture), hourglass deformity, malignant degeneration, and cases where the ulcer fails to heal or recurs frequently under medical care.[19-21] Surgery does not mean, however, that the patient will remain free of ulcers. Such people must be told that, despite their operation, that an ulcer can recur and that they must continue to maintain careful living and eating habits.

BIBLIOGRAHY

1. Ivy, A. C.: J. A. M. A. 132:1053, 1946.
2. Emery, E. S.: Rhode Island Med. J. 27:509, 1944.
3. Bolton, W. W.: Hygeia 24:352, 1946.
4. Kiefer, E. D. & McKell, D. McC., Jr.: J. A. M. A. 133:1055, 1947.
5. Mulsow, F. W.: Am. J. Digest. Dis. 8:112, 1941.
6. Meielas, L. E. & Russakoff, A. H.: Am. J. Dis. Child. 67:384, 1944.
7. Wamberg, E.: Acta Paediat. 33:86, 1945.
8. Eusterman, G. B.: Gastroenterol. 8:575, 1947.
9. Driscoll, E. F. & Aaron, A. H.: New York State J. Med. 44:266, 1944.
10. Held, I. W.: Rev. Gastroenterol. 8:350, 1941.
11. Ehrmann, R.: Rev. Gastroenter ol. 12:117, 1944.
12. Kanevsky, J.: Am. J. Med. Sci. 206:90, 1943.
13. Radloff, F. F.: Gastroenterol. 8:343, 1947.
14. Palmer, W. L.: Cincinnati J. Med. 27:775, 1946.
15. Bolen, H. L.: Rev. Gastroenterol. 10:187, 1943.
16. Dragstedt, L. R. et al: Gastroenterol. 3:450, 1944.
17. Wolf, S. & Wolff, H. G.: "Human Gastric Functions," Oxford University Press, 1943.
18. Gainsborough, H. & Slater, E.: Brit. Med. J. 2:253, 1946.
19. Gill, A. M.: Med. Press & Circ. 1:84, 1944.
20. Miller, T. G.: J. Michigan State Med. Assoc. 46:198, 1947.
21. Winkelstein, A.: Bull. New York Acad. Med. 20:87, 1944.
22. Hinton, J. W.: Bull. New York Acad. Med. 22:623, 1946.
23. Douthwaite, A. H.: Brit. Med. J. 2:44, 1947.
24. Parson, G. W.: Tri-State Med. J. 14:2625, 1942.
25. Ehrmann, R.: Rev. Gastroenterol. 14:89, 1947.
26. Conference on Therapy: New York State J. Med. 43:57, 1943.
27. Crescenzo, V. M. & Cayer, D.: Gastroenterol. 8:754, 1947.
28. Sippy, B. W.: J. A. M. A. 64:1625, 1915.
29. Lesser, M. A.: Drug & Cosmetic Ind. 43:673, 1938.

30. Goodman, L. & Gilman, R.: "Pharmacological Basis of Therapeutics," New York, MacMillan, 1941. pp. 778-790.
31. Collins, E. N.: J. A. M. A. 127:899, 1945.
32. Jankelson, I. R.: Am. J. Digest. Dis. 14:11, 1947.
33. Woldman, E. E. & Rowland, V. C.: Rev. Gastroenterol. 3:27, 1936.
34. Kyger, E. R., Hashinger, E. H. & Wilhelmy, E. W.: Am. J. Digest. Dis. 6:363, 1939.
35. Lichstein, J., Simkins, S. & Bernstein, M.: Am. J. Digest. Dis. 12:65, 1945.
36. Martin, J. G. & Wilkinson, J.: Gastroenterol. 6:315, 1946.
37. Kraemer, M. & Lehman, D. J., Jr.: Gastroenterol. 8:202, 1947.
38. Mulholland, J. H., Co Tin, Wright, A. M. & Vinci, V. J.: Ann. Surg. 117:512, 1943.
39. Co Tui, et al: Ann. Surg. 120:99, 1944.
40. Co Tui, et al: Gastroenterol. 5:5, 1945.
41. Co Tui: Rev. Gasteroenterol. 14:108, 1947.
42. Levy, J. S.: Gastroenterol. 4:375, 1945.
43. Vinci, V. J., et al: Connecticut State Med. J. 10:281, 1946.
44. Ruggiero, W. F., Co Tui, & Bianco, A. A.: New York State J. Med. 46:2395, 1946.
45. Kimble, S. T., Jr.: Gastroenterol. 8:467, 1947.
46. Margaretten, E. & Kamer, L. A.: J. Med. Soc. New Jersey 44:228, 1947.
47. Hodges, H. H.: Gastroenterol. 8:476, 1947.
48. Crabb, J. A.: J. Kansas Med. Soc. 44:368, 1943.
49. Metz, M. H. & Lackey, R. W.: South. Med. J. 36:747, 1943.
50. Gunther, L.: U. S. Naval Med. Bull. 46:1743, 1946.
51. Bayliss, M. W. & Starling, E. H.: J. Physiol. 28:325, 1902.
52. Anon.: Med. Times 74:30A, Feb. 1947.
53. Kosaka, T. & Lim, R. K. S.: Proc. Soc. Exper. Biol. & Med. 27:890, 1930.
54. Ivy, A. C.: Gastroenterol. 3:443, 1944.
55. Ivy, A. C.: Federation Proc. 4:222, 1945.
56. Gray, J. S. Bradley, W. B. & Ivy, A. C.: Am. J. Physiol. 118:463, 1937.
57. Hands, A. P. et al: Am. J. Physiol. 133:314, 1941.
58. Hands, A. P.: Endocrinol. 30:905, 1942.
59. Sandweiss, D. J.: Gastroenterol. 1:965, 1943.
60. Sandweiss, D. J. et al.: Am. J. Digest. Dis. 8:371, 1941.
61. Hubacher, O.: Lancet 2:272, 1946.
62. Morrison, L. M.: Am. J. Digest. Dis. 12:323, 1945.
63. Schiffrin, M. J. & Warren, A. A.: Am. J. Digest. Dis. 9:205, 1942.
64. Shoch, D. & Fogelson, S. J.: Proc. Soc. Exper. Med. & Biol. 50:304, 1942.
65. Fogelson, S. J. & Shoch, D.: J. A. M. A. 73:212, 1944.
66. Kirsner, J. B. & Wolff, R. A.: Gastroenterol. 2:93, 1944.
67. Kirsner, J. B. & Spitzer, E. H. Gastroenterol. 2:348, 1944
68. Steigmann, F. & Marks, A. R.: Am. J. Digest. Dis. 11:173, 1944.
69. Shay, H., Komarov, S. A. & Seplet, H.: Science 105:128, 1947.
70. Shay, H., Komarov, S. A., Siplet, H. & Gruenstein, M.: Am. J. Digest. Dis. 14:99, 1947.
71. Shay, H., Komorov, S. A., Siplet, H. & Fels, S. S.: Science 103:50, 1946.

Ambergris in Perfume Extracts

(*Continued from page 460*)

opening of a capacity of 10 to 12 liters. To this powder, 8 liters of alcohol at 96° is added. This mixture is left for 8 days and should be stirred from time to time. The liquid is then poured into another container and a fresh lot of 8 liters of alcohol is poured over the ambergris. After 8 days, the alcohol is again poured off and so on for five successive washings of 8 liters each. The 40 liters are then combined in one container, filtered, and left to age in a warm place for at least six months. This is of major importance.

The settlement which is left is treated with 10 liters of alcohol and is left in this state until the day a new tincture is prepared. The alcohol left in the container will represent the first washing in the new operation. After the settlement has been exhausted it is left to dry for a while, it is ground and placed in metal boxes and can be used in sachet powders or in powder containing musk. To obtain a good result in the preparation of an extract, it is necessary to use 30 to 80 cc. of tincture to each liter of extract. How to use the tincture of ambergris is a delicate part of the subject, one that is the most difficult to express in a concrete way with mere words. In order to understand the part which ambergris will play in a perfume, we should choose a good extract which has had a deserving success and we should study it with complete attention. To do this, a few drops should be poured on a blotter. Allow the alcohol to evaporate and inhale the perfume. At that time, we experience complex sensations which do not seem to act in the same way on the olfactory organs. First of all, we perceived a note which is formed by all the volatile constituents; aldehydes and ethers, which gives the departing freshness. After that, the extract unfolds.

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•

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•

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•

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It is the medium which has to be agreeable, delicate, pleasant, distinguished, sweet and powerful. Finally behind this medium, you can find the base note which can be compared to the background of a picture or to the lower chords of a musical harmony. Isolated, this note would be deprived of charm, but as an accompaniment it puts in value all the other portions of the composition. In fact, if we follow in the same manner the evaporation of a solution of jasmin, absolutely pure, at ½ or 1 per cent, we will find again the three parts mentioned above. In other words, in the beginning a fresh portion will be released that which is due to fatty aldehydes, the full series of ethers of benzyl alcohol and its its equivalents, of linelol ethers and its derivatives, after that a medium which is formed by the linelol and eugenol and their equivalents, the aromatic aldehydes, jasmone and the full series of more or less well-known elements give the whole unequaled delicacy. Finally, a powerful base which is composed by the phenols and the indolent products. This consists of an amalgamation of bodies that the flower secretes or eliminates in the form of gaseous products which have the mission of either attracting pollen-carrying insects or insuring the evacuation of non-assimilated products. In this complex, harmony of products so different in their origin and their function, nature has succeeded in creating one of the sweetest, most complete and noblest perfumes known. This harmony forms a construction of inimitable delicacy and of wonderful blending. The perfumer who intends to make a new composition will have to be inspired by these principles and apply them with the modesty that becomes all those who have studied the work of nature and who have meditated upon its perfection.

In the particular case which we are discussing, we will show how this construction will be built and the important part the ambergris will play. Let us take first of all two or three chosen specialties which are outstanding amongst the perfumes in vogue and which are not incompatible. Let us seek through a judicious dosage to obtain a new note agreeable and controlled. Let us add synthetic flower perfume well-chosen and well-dosed: cassis, lily of the valley and lilac, then the mass of products which constitutes the base, hydroxycitronellal, ionone, linelol, eugenol, styrax, etc. Let us add the proper quantity of natural flower essences absolute: jasmine, orange, rose, cassis, according to the note of the composition. All these elements giving a floral harmony forming with the initial note a perfume recalling a natural production. To obtain a sweet odor in the flask of an agreeable touch at the beginning of the evaporation, we will use bergamot natural or terpeneless, lemon, orange terpeneless, benzyl acetate, synthetic jasmine, fatty aldehydes which will have to be used with a lot of discretion. After that, we will create the binding with the bases by a sort of counter-song which will reinforce the floral note. We will take the three old standards: santal, vertivert, patchouly which we will ally with the products which we judge necessary for the good tone of the preparation. The base will contain

tincture of musk, civet and castoreum if necessary. Ambrette and ketone musk and fixed products such as heliotropine, vanillin and coumarin are also used to conform with the note chosen. At that moment if we study the liquid carefully on several blotters at different stages of evaporation, we will note that in spite of our efforts, the different elements tend to evaporate successively. If the note of the perfume is not stabilized, we will detect the elements which seem to dominate. We will reduce the dosage. When everything is stabilized we will start to add tincture of ambergris at the rate of 3 per cent which we will then increase to 8 or 10 per cent. We will note without effort that all the elements used will now take a definite place.

The base which we have so much admired in the solution of jasmine will be recognized thanks to the presence of ambergris. To resume, let us say that the perfumers are not sufficiently interested in ambergris because they have been offered a variety of mediocre quality or because the tincture has been used in reduced quantities. Let them choose with care, the quality of ambergris, let them prepare correct tinctures and utilize them in sufficient quantities and they will then note that the extracts which they create will have a base, a finish, a distinction that no other product could give them.

Selecting Detail Men

(Continued from page 465)

they feel that conditions are intolerable in the company for which they are working. So there is a fair amount of turnover in detail men in all companies, although a real effort is made to keep this turnover at a minimum.

Pharmaceutical manufacturers have to be particular about the type of men which they employ for detailing for the same reason that any company has to be particular about the salesmen which it sends into the field: these men give to the doctors the only impression which they are apt to get as to the type of personnel of the company in question. A certain impression of the company reaches the doctor through the products which they make, through the type of packaging used, through the type of advertising, both in journals and by direct mail, but they are purely impersonal. The detail man is one who gives the doctor the personal touch of the company, and this is extremely important. How the man appears, how he is trained, how he acts with respect to the doctors upon whom he calls—all these things are quite apt to react favorably or unfavorably upon the doctor with respect to the people running the company whose products he is prescribing or is being urged to prescribe. And in his mind, unconsciously or consciously, from these men the doctor might be more favorably, or less favorably inclined, toward the products of the manufacturer whom the detail man represents.

These are some of the reasons why pharmaceutical manufacturers must give so much attention to their detail staffs. The successful pharmaceutical manufacturers are the ones that have detail staffs which are

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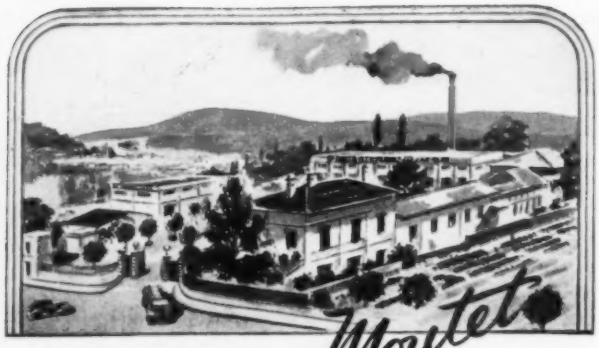

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effective in a high degree. If one would study the success which certain pharmaceutical manufacturers have in outstripping many other pharmaceutical manufacturers in the introduction of a new product which many manufacturers introduce at practically the same time, one could learn which companies have the most effective detail staffs. Then if one could learn the methods of selecting and training detail men employed by these successful companies, one would be in a good position to emulate these companies in this important phase of the pharmaceutical business.

Cosmetics Are Big Business

(Continued from page 455)

more specific cases of individual products, it is not always easy to apply statistical norms to such an intricate pattern as is the picture puzzle of a nation's human existence.

Take skin lotions for an example. Near 70,000,000 packages of hand lotions were sold in the early days of the war and that does not take in a probable 35,000,000 packages of border products for which no reliable statistics were available at that time. Who can measure the amount of good derived from their existence by housewives, office workers and, later during the war, by the millions of women factory workers who were attracted to the use of skin lotions and skin creams by the professional beauty hazards to which they found themselves exposed?

Skin cream sales amounted to $90,000,000 in 1946, according to the finding of this magazine. In 1941, when the War Production Board took an interest in activities of the cosmetic and other industries, 263 firms made 2,123,000 gallons of hand lotions alone and 443 others reported a production of 134,000,000 pounds of cleansing creams. A total of 473 firms packaged 86 million packages of creams.

To turn out this stream of skin aids in liquid and cream form, the cosmetic industry must draw upon nearly a dozen other industries, some of minor importance, some dwarfing cosmetics. The list of purchases includes jars, bottles, caps, textiles, paper, alcohol, glycerine, waxes, mineral oils, acids of various description, salts, perfume essences, etc., and the shipping of the world is kept busy as foreign countries are filling part of these varied needs.

Using materials of top quality, because of the nature of its products, the cosmetic industry is proving itself a good customer for the industries from which it buys. However, while the raw material costs of the industry have risen in recent years, in some cases as much as 400 per cent, retail prices have remained comparatively low.

It must be taken into consideration, in this respect, that the retail sales price of a product is determined not only by its cost to the seller, but even more by the degree by which it answers or fits itself to the living problems of the consumer. There is a long journey from the purely cosmetic utility of the average face cream of the

1918 period, for an example, to the wide variety of economic uses for which cream specialties are now made available.

Less directly demonstrable than the straight contribution made by the cosmetic industry to national income, by way of its wage payments and wage-making energies, is that intangible, but nevertheless just as very definite aid, that it renders to millions of income earners whom it assists in keeping profitably employed by making them look younger than their years. How much of the millions of dollars, spent each year for hair dyes and similar aids, are in the nature of job permanency insurance, nobody can say of course with certainty. No one doubts that it is large and that it pays heavy dividends to over-age workers who as the result of their purchases keep themselves in circulation. Similarly, facial cosmetics, lipsticks etc. playing their utilitarian "face saving" role, beside their purely cosmetic uses, save hundreds of thousands of wage and salary earning hours to the national economy, while, at the same time, giving employment to wage earners within the cosmetic industry.

Exports of cosmetics have risen substantially with the return of peace. Witness exports of manicure preparations of $1,003,000 in 1946 ($369,000), rouges, face powders, lipsticks at $4,188,000 ($1,804,000) hair preparations $3,923,000 ($587,000), skin preparations $886,000 ($384,000), for an example. (The figures in brackets represent prewar export values).

Admittedly, high as these figures are, they are only a small part of the industry's production and could be easily spared without affecting the income of its workers and others depending upon its prosperity. Face powder production, for an example, amounted to $72,000,000 in 1946, only 2.5 per cent of which went abroad. Of the annual output of manicure articles of $22,000,000 export claimed 4.5 per cent. However, exports of such an article of intimate use as is the cosmetic product implies more than a mere business transaction. It constitutes, in a closer sense, the acceptance of American living standards by new sections of the world and, for this reason, is well worth the effort as it makes a useful pace maker for other more utilitarian American industrial materials and products.

Parenteral Drug Enforcement

(*Continued from page 457*)

the assays. Sooner or later the product would be faulty and escape detection because the assay was not sufficiently comprehensive.

The intangibles in control systems are increasingly attracting the attention of management and regulatory officials. As you know, the new drug sections of the Food, Drug, and Cosmetic Act require manufacturers to submit a full statement both of the manufacturing procedures to which the drug is subjected and of the control systems and methods used to acquire assurance that each successive batch of the new drug is of the identical composition as that described in the applica-

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tion. We have encountered instances where the new drug applications were apparently prepared on a more or less theoretical basis. Perhaps at the time of submission the manufacturing operations were in a pilot stage. The application, on the other hand, would describe the procedures as though full commercial production were in effect. This raises not only the very real probability that such new drug applications may be invalid but also the possibility that in the transition from the pilot to the commercial production stage the identity of the drug may differ from that described.

A review of the control plans of many firms leaves nothing to be desired. Some inspections have shown that the plan is not necessarily adhered to. Probably, when the plan was orginally put into operation, it was actually carried out as was contemplated. As time passed changes in personnel had occurred, changes in duties had taken place, and the natural disposition of many people to take short-cuts had manifested itself. This is why Food and Drug inspectors when making inspections of parenteral and other drug firms not only obtain the flow sheet, the master control plan, and specimens of the records involved but also personally observe and follow through a sufficient number of batches in production, as well as some which have been completed, to assure themselves that through inadvertence, or otherwise, actual practices do not deviate from the plan.

Perhaps the most important intangible in a control program is the caliber, ability and personal characteristics of the individuals who have the responsibility of carrying it into effect.

Continuous attention to a control system and a reappraisal of its completeness at frequent intervals are essential to prevent backsliding.

We have reluctantly reached the conclusion that at least during our lifetime there will always be instances where errors of a serious nature are made and dangerous drugs are distributed widely before the error is detected.

An increasing number of drug firms have apparently reached the conclusion that it is a wise policy to notify the Food and Drug Administration when errors of this sort occur. We have participated in removing from the market a great many drugs after such incidents have taken place. It is our view, and it is supported by experience, that drug firms alone cannot do as complete and rapid a job of removing dangerous products from the market as can be done if they communicate the facts promptly to the enforcement officials. Time after time we have found dangerous products remaining on the shelves of various types of outlets after the dealer had received a communication from the manufacturer asking him to return the merchandise. There have been many instances where injuries have been prevented through the systematic visits of Federal inspectors and cooperating state and city officials.

The Administration learns of dangerous or potentially dangerous drugs, which have escaped detection, before shipment in interstate commerce in two ways. Many of these incidents, as we have stated, are reported to us

by the manufacturers themselves just as soon as they learn the facts. Others are uncovered through the thorough investigation of all complaints received either directly by the Food and Drug Administration or through reports made to cooperating state and city officials.

We are well aware of the fact that just because a complaint is made about a particular article it does not mean that the medicine is at fault. We investigate several thousand complaints each year. They cover almost every conceivable item subject to the terms of the Food, Drug, and Cosmetic Act. The percentage of the complaints shown by careful investigation to be groundless is very high. There are, however, enough cases where the complaint is justified to warrant the expenditure of the extensive time and effort required to investigate all of them.

We sincerely hope that the present disposition of leaders in the drug industry to make known to us promptly facts concerning defective drugs which have been distributed will be continued and that firms which regard such incidents as highly confidential matters, to be hushed up as much as possible, will change their views.

In recent years many articles have been written dealing with control systems, control records, and with almost all phases of plant control. We do not believe that comparable articles have dealt with the subject of the handling of complaints from physicians or their patients.

Wide variations exist between different firms in their handling of complaints. Some firms have established procedures which are designed to deal very promptly and very thoroughly with all complaints which, if valid, would suggest that an undetected error in manufacturing may have been made or that the product may be dangerous for some other reason.

These firms refer the complaints promptly to their competent medical staffs and steps are taken at once to re-examine the reserve stock of that particular control and of other related batches. Competent individuals determine what, if any, further information from the prescribing physician is needed. Their filing systems are such as to disclose immediately whether or not more than one complaint has been received with respect to a particular article or batch. All other steps which ingenuity has devised are taken to determine promptly whether or not the product is at fault.

We have, however, learned that other firms have replied to valid complaints with communications which approach form letters. They have no procedure which results in the complaints being considered by competent physicians, or other technically trained individuals capable of determining the further steps which should be taken, to ascertain the validity of the complaint as promptly as possible.

In spite of the fact that the Food and Drug Administration, and I assume all drug manufacturers, are constantly receiving complaints which are not sound, we believe it is necessary in the protection of the public

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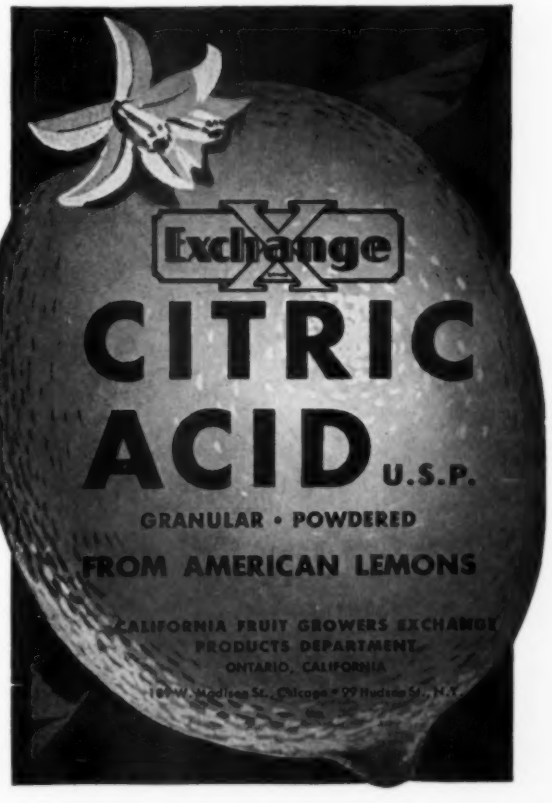

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health that all complaints be considered by persons competent to evaluate them, and that all supplemental information necessary to determine the facts be obtained.

Finally, we give the larger percentage of our time and facilities to the investigation of those relatively few firms and individuals whose records disclose that they are quite likely to violate the law either through deliberation, ignorance, or carelessness. This obviously protects both the public and the honest, careful informed manufacturer who otherwise would be at a competitive disadvantage.

Expansion of the Industry

(Continued from page 461)

and classes of people who now use cosmetics in a big way and in a real way. Also the gains have come about in large measure through the creation of many new types of cosmetic preparations which have found definite places in the market. The extension of users of cosmetics to much larger numbers and classes of people was caused by the increased employment brought about by the war. Many women who never before held steady positions in which they gained self-confidence and a feeling of pride, became constant users of cosmetics when they became consistent wage earners. Anyone who lives in a large city in which there is a large colored population can see for himself how the members of the colored race have turned to cosmetics. It is said that the largest retail business—perhaps excepting food stores—in Harlem, the colored district of New York, is that of the beauty shops. This is a clear indication of the way in which cosmetics have taken hold with groups of people who formerly were very small users of cosmetics.

Therefore, cosmetic manufacturers have a much broader base upon which to build for the future than they had before the war brought about this increase. And if they build upon this base in the same manner in which they built upon the much smaller base which resulted after World War I, there is no way of predicting the probably dizzy heights which might be reached. In other words, the future of the cosmetic branch of this industry looks bright indeed and manufacturers should prepare themselves for this bright future so that they will be able to get their rightful share of it.

It was natural that the sharp increases in demand for the products of cosmetic manufacturers during the war years should bring into the industry a large number of new manufacturers and distributors, some good and some bad. It is among these newer manufacturers that one would expect to find the weaker manufacturers who would be hard pressed in a falling off in the sales of cosmetics for a comparatively short period of time. And even though they were not hard pressed financially in such a period, they would be the first to lose confidence in the future of the industry and an attempt to unload. It is also quite natural that many of these newer manufacturers should suffer to an undue extent in a period of

recession in the industry due to the fact that the older and more firmly established manufacturers should return closer to their normal positions in the industry as they are able to obtain raw materials and other supplies and turn out goods to meet whatever volume is demanded of them. After all, the newer manufacturers who entered the industry during the war, were, in the main, only able to sell their goods because of the fact that the old established manufacturers were curtailed by government order in the amount of critical materials which they could use.

As might be expected, many of these newer manufacturers are manned by people with plenty of experience in the industry and their products have been, and will continue to be well received. So not all of these newer manufacturers will fall by the wayside even though there is a recession in the sales volume of cosmetics. Of course many of these newer manufacturers over-extended themselves during the war years, and when the curtailment of inventories by retailers during the first months of this year caused sales by manufacturers to decline sharply, they were sorely pressed in a financial way even though the products of many of them were still selling and were well received by the public.

The fear now expressed by many manufacturers is that the extremely high prices of food in particular, and of clothing and many other things, will curtail buying of many things that would otherwise move in large volume. The first thing that people must do to exist is to eat. Also they must be clothed. Cosmetics are quite properly considered a necessity, but if the family budget will not allow the extent of purchasing of these products due to the sharp increases in food and other vital things, then the amount of money spent for cosmetics must be curtailed. This might well mean that many people who formerly bought cosmetics in the middle or higher priced range, will buy cosmetics selling at lower levels. If this is to be the case, then the dollar volume of the industry might decline, but not the number of units sold. However, those who have been buying the lower-priced preparations will also have to curtail their purchases of cosmetics and the only way in which they can economize is to use less.

However, the situation which exists today with regard to prices cannot be of lasting duration. While, at the moment, the future is not clear and no one can forecast accurately when food prices will break, a change is certain at some time, whether it be a year, or two years, or longer in the future. And when this break does come, the amount of money spent for food will resume its former relative position in the family budget and money to be spent for cosmetics and other things will once again be available in proper amount. When this time comes, a real upsurge in the volume of cosmetics sold can be anticipated. Since under present conditions of high food prices the volume of the cosmetics is still more than double what it was before the war—even though there has been a slight decline in volume this year—a release of money through lower

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prices for food and other things at some time in the future will then bring about new high figures in cosmetic sales volume.

Predicting Consumer Acceptance

(Continued from page 469)

warm reds, the form qualities of the card stressing circularity, enclosing and encompassing shapes, round edges, no sharp angles, and no elongated objects disturbing the circularity of the design. Acceptable symbols of warmth and protectiveness most often were such designs as flowers, baskets, firesides, open doorways, lighted windows, although the actual layout of the card, combining these elements and forms, had to be carefully planned. *The mere presence of blue color, circular shapes and flowers, for example, did not insure an acceptable Mother's card, although each one of these factors was important.*

"The Sister idea of virginal innocence was best symbolized through the occasional pinks but predominant white. Harsh reds and other bright colors were resisted. Flowers used must be of the light, small spring flower type, not roses (unless white) or orchids. Only certain symbols of simplicity or innocence seemed appropriate—angels, small children, cupids, young animals—and only in certain juxtapositions. In general the design should be light and fleeting in impression.

"In the Father cards, the study predicted dark colors, rough and angular designs, rough and virile subjects as most appropriate—which they were. Reds, dark greens, browns, tans, were suggested colors. Angularity and masses of form broken by elongated objects seemed appropriate. Outdoor scenes and scenes of men's paraphernalia (predominantly phallic—i.e., ties, pens and pencils, trains) were chosen most often, as our formulations predicted."

To explore the patterns of belief, the Thematic Apperception Test was used, a refinement of the inkblot test used by psychiatrists. The subjects were asked to give their interpretations of the somewhat hazy illustrations. This disclosed the private desires of the greeting card buyers, and thus provided the answer to *why* certain cards were chosen over others. The same principles apply exactly to all sorts of cosmetic packages and advertising appeal, the researchers point out.

The principles of this study were tested through Warner's and Henry's predictions on an entire year's production of greeting cards. A battery of 871 female judges, under carefully controlled conditions, were shown the cards, with the result that those designated in advance by Warner and Henry as "acceptable" were chosen seven to one over those designated "unacceptable."

All the investigators require in making a report on a consumer product are samples of the package or container, pictures of their intended use, advertising copy and illustrations, and their report should give an accurate prediction on consumer acceptance.

As a result of the study, Gartner and Bender has

successfully expanded its production of recommended cards and curtailed manufacture of cards which violated the social and psychological principles.

Social Research, Inc., is located at 1525 East 53rd Street, Chicago, with Dr. Burleigh B. Gardner as executive director. A Hollywood office also is being opened, to be managed by Frances Farmer Wilder, former president of the Association of Women Broadcasters, and until recently CBS consultant on daytime programs.

READERS' QUESTIONS

AFTER-SHAVE LOTION: I am going into the production of an after-shave lotion. I want something which will contain a high proportion of alcohol, some glycerine, coloring and perfume. If it is at all possible, I would like to use denatured alcohol. Will this require a permit? Can you give me sources of supply for coloring and perfuming agents? Hastings.

An after-shave lotion made according to your requirements can be prepared with about five per cent of glycerine, up to about 60 per cent of alcohol and the rest water, perfume and color being added to suit. The use of alcohol, denatured or not, requires a permit from the government. In this connection I should like to point out that some specially denatured alcohols are made up with perfuming agents. Sources of supply for color and perfumes are available in the advertising pages of our publication.

CAMPHOR CREAM: I am interested in producing a camphor cream as a cosmetic. I should like to have a cream which has a cleansing and emollient effect in which the action of camphor will be an added asset. New York.

As you are probably aware, camphor ointments are described in both the "National Formulary" and the "Pharmaceutical Recipe Book." These might be modified to meet your requirements. However, I think you will get better results and a better product by incorporating camphor in a good emollient cream of the emulsion type. The camphor should be dissolved in the hot, oily phase of the emulsion.

HENNA RINSE: For some time I have been buying a prepared henna rinse and since I use a lot of the product I think I could do better if I made it myself. Could you give me a fairly simple formula? Swampscott.

The following is a standard method for making a henna rinse:

Henna leaves (coarsely ground)	**10.00**	**per cent**
Alcohol	**44.00**	" "
Water	**45.75**	" "
Perfume	**0.25**	" "

Boil the water and when it is boiling violently add the henna leaves, shut off the heat and allow the mixture to stand for four hours. Run it through a strainer to remove the leaves and add the alcohol and perfume.

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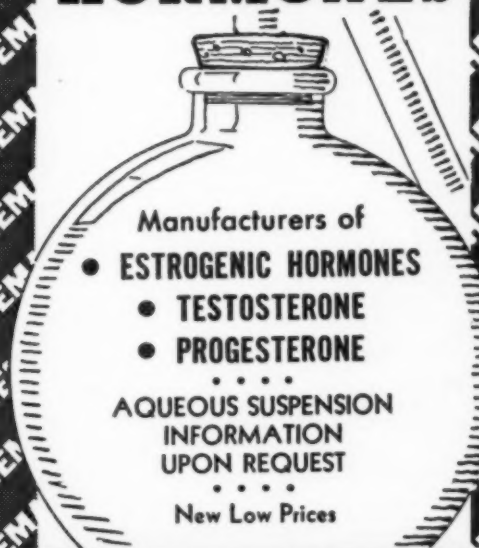

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Chrystal & Co., Charles B. . . . 562
Coby Glass Products Co. . . . 511
Colgate-Palmolive-Peet Co. . . . 567
Colton Co., Arthur . . . 515
Commercial Solvents Corp. . . . 494
Crown Cork & Seal Co. . . . 479
Dallal & Co., D. S. . . . 564
Danco, Inc., Gerard J. . . . 518
Devold Oil Co., Inc., Peder . . . 523
Diagraph-Bradley Stencil Machine Corp. . . . 514
Dodge & Olcott, Inc. . . . Insert between 432-433
Dow Chemical Co. . . . Insert facing 524
Dreyer, Inc., P. R. . . . 426
Drew & Co., Inc., E. F. . . . 440
Duche & Sons, Inc., T. M. . . . 563
duPont de Nemours & Co., E. I. . . Insert facing 444
Durlin Corp. . . . Insert facing 425
Economic Machinery Co. . . . 515
Enjay Company, Inc. . . . 519
Eppenbach, Inc. . . . 513
Ertel Engineering Corp. . . . 501
Essential Aromatics Corp. . . . 439
Ever Ready Label Corp. . . . 511
Exact Weight Scale Co. . . . 514
Fairmount Chemical Co., Inc. . . . 567
Felton Chemical Co., Inc. . . . Insert facing 520
Filter Paper Co. . . . 513
Fine Organics, Inc. . . . 547
Firmenich & Co., Inc. . . . Cover 4
Florasynth Labs., Inc. . . . 434
Food Research Laboratories, Inc. . . . 567
French, Inc., Benj. . . . 530
Fritzsche Bros. . . . Insert between 532-533
Gardner-Richardson Co. . . . Insert facing 485
Glass Industries, Inc. . . . Insert facing 476
General Drug Co. . . . 542
Gesell, Inc., R. . . . 560
Givaudan-Delawanna, Inc. . Insert bet. 424-425; 500
Goldschmidt Chem. Corp. . . Insert between 436-437
Greff & Co., R. W. . . . 540
Gunning & Gunning . . . 540
Hagerty Bros. & Co. . . . 514
Hema Drug Co., Inc. . . . 565
Heyden Chemical Corp. . . . Insert facing 436
Hoffmann-LaRoche, Inc. . . . 534
Hooker Electrochemical Co. . . . 427
Hopkins & Company, J. L. . . . 523
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Huisking & Co., Inc., Chas. L. . . . 523
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Inland Alkaloid Co. . . . 562
Interstate Color Co., Inc. . . . 567
Intramed Co., Inc. . . . 547
Jelly & Co., Walter H. . . . 560
Kachurin Drug Co. . . . 522
Katz & Co., Dr. Alexander . . . 439
Kelton Cosmetics Co. . . . 555
Kessler Chemical Co. . . . 519
Kiefer Machine Co., Karl . . . Insert facing 508
Kimble Glass . . . Insert facing 509
Kohnstamm & Co., H. . . . Insert facing 445
Kolmar Laboratories . . . Insert facing 448
Koster-Keunen Mfg. Co., Inc. . . . 530
Kraft Foods Co. . . . 490
Lanatex Products Sales Company . . . 547
Lemke & Co., B. L. . . . 540
Leonhard Wax Co., Theodor . . . 568
Lowe Paper Company . . . 483
Lueders & Co., George . . . Insert between 436-437
Lusteroid Container Co. . . . 486
Magnus, Mabee & Reynard, Inc. . . . 442
Mallinckrodt Chemical Wks. . . . Insert facing 449
Mantrose Corp., The . . . 528
Merck & Co., Inc. . . . 435
Metal-Glass Products Co. . . . 510
Michel & Company, Inc., M. . . . 564
Modern Cosmetics . . . 548
Monsanto Chemical Co. . . . Insert facing 481; Bet. 436-437
Moutet, J. Henri . . . 558
National Aniline & Chemical Co. . Insert facing 424
National Can Co. . . . 477
Naugatuck Aromatics . . . 433
Neumann, Buslee & Wolfe, Inc. . . . 536
New England Collapsible Tube Co. . . . 421
New Jersey Machine Corp. . . . Insert facing 505
New Jersey Zinc Co. . . . 559
N. Y. Quinine & Chemical Works . . . 430
Norda Essential Oil & Chemical Co. . . . Insert facing 432
Norton Laboratories, Inc. . . Insert between 436-437
Orbis Products Corp. . . . Insert facing 516
Owens-Illinois Glass Co. . . . Insert facing 477
Oxzyn Company . . . 498
Paisley Products, Inc. . . . 481
Palm Fechteler Co. . . . 500
Parento Co., Compagnie . . . 436
Paris Cosmetics, Inc. . . . 424
Parsons Imports, M. W. . . . 522
Penick & Co., S. B. . . . Insert between 432-433; 526
Pennsylvania Glass Products Co., Inc. . . . 480
Pennsylvania Refining Co. . . . Insert facing 437
Pfaltz & Bauer Co., Inc. . . . 567
Pfizer & Co., Inc., Chas. . . . 488
Plaskon Division (Libbey-Owens-Ford) . . . 470
Polak & Schwarz, Inc. . . . 564
Potdevin Machine Co. . . . 510
Powell & Co., Inc., John . . . 518
Prentiss & Co., R. J. . . . 556
Progressive Machine Works . . . 564
Purocaine, Inc. . . . 553
Richford Corp. . . . 486
Robert, Inc., Henri . . . 428
Robinson Wagner Co. . . . 425
Rohm & Haas Company . . . 563
Ross, Co., A. H. . . . 509
Roure-Dupont, Inc. . . . Insert facing 525
Santoine Company of America, Inc. . . . 523
Schimmel & Co., Inc. . . . 448
Seeley & Co., Inc. . . . 561
Seydel Chemical Co. . . . 567
Sheffield Farms Co., Inc. . . . 443
Solvay Sales Corp. . . . Insert facing 493
Sonneborn Sons, Inc. . . . 432
Standard Cap & Molding Co. . . . 485
Standard Oil Co. (Indiana) . . . 423
Standard Pharmacal Co. . . . 540
Stanton Laboratories, Inc. . . . 550
Stokes Machine Co., F. J. . . . 502
Stokes & Smith Co. . . . 512
Strong, Cobb & Co., Inc. . . . 429
Sturge Ltd., John & E. . . . Insert between 448-449
Summit Chem. Products Corp. . Insert bet. 448-449
Swindell Bros., Inc. . . . 474
Synfleur Scientific Labs., Inc. . . . Insert bet. 436-437
Syntomatic Corp. . . . 431
Thurston & Braidich . . . 538
Tombarel Products Corp. . . . 557
Ungerer & Co., Inc. . . . Cover 3
Union Carbide & Carbon Corp. Insert bet. 436-437
U. S. Automatic Box Machy Co. . . . 506
U. S. Bottlers Machinery Co. . . . 501
U. S. Industrial Chemicals, Inc. . . Ins. bet. 496-497
van-Ameringen-Haebler, Inc. . . . Ins. bet. 428-429
Vanderbilt Co., R. T. . . . 542
Van Dyk & Co. . . . Insert facing 428
Verley & Co., Albert . . . Insert between 440-441
War Assets Administration . . . 441
Welch, Holme & Clark, Inc. . . . 554
Wigton-Abbott Corporation . . . 512
Will & Baumer Candle Co. . . . 551
Witco Chemical Co. . . . 568
Wolf & Co., Jacques . . . 542
Zimmerman Incorporated, W. F. . . . 447